

JPRS-TEP-87-023

035110

2 DECEMBER 1987



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# ***JPRS Report***

# **Epidemiology**

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## EPIDEMIOLOGY

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/9987

## ELEPHANTIASIS ON INCREASE IN RANGPUR DISTRICT

54500032 Dhaka THE BANGLADESH OBSERVER in English 16 Sep 87 p 7

[Text]

RANGPUR Sept. 12:—Elephantiasis disease is now on increase in different parts of greater Rangpur district. According to information received here, thousands of villagers have been suffering from this odd disease during their whole lives without any remedy. Specially the women-folk in large-scale fell victim of the disease. The worst hit areas are, Aditmary, Hatibandha, Kaligonj, Dimla, Chilmari, Rowmari, Fulchari Khulna, Jaldhaka, Gana-gachara and Rangpur Sadar upazilas.

The legs are main target of the disease. In many cases it was noticed that both legs of a victim are attacked by the disease. Due to attack of the disease, legs below-knee portion abnormally got swollen and with this, it turned similar to elephant's leg.

A number of physicians and health experts said that the disease is spreading by atmosphere and in many cases, it is found to be hereditary. The victims with their swollen

legs cannot move easily. They cannot wear sandals or shoes and most of the days they go bed-ridden due to strong pain in the legs.

It is most painful that the victims becomes isolated from the society as they cannot adjust in it due to odd shape of their legs, particularly the female-victims fell in embarrassing conditions. There are many instances that conjugal relation of the newly-wedded brides have been severed due to attack of the disease. They ultimately go for begging to maintain livelihood.

According to the doctors, the disease in its preliminary stage can be cured. But, it is observed that the ailing persons particularly belong to low-income community. usually they come to the doctors at its matured stage when a little could be done.

A mass awareness followed by collection of statistics on the reasons of its out-break and proper steps to route it out, are needed to overcome the situation.

## BRIEFS

MALARIA OUTBREAK--Maulvibazar, Oct 6:--Malaria fever has broken out all over Maulvibazar district. The people living in the different tea gardens along Bangladesh border are the worst sufferers. According to an official source during the period from January to August, 1987, 605 malaria patients have been detected in the district, of them 441 patients are suffering from malaria fever in different tea gardens of Srimongal upazila while 73 persons are suffering in Barlekha upazila, 69 in Kamalgonj upazila, 15 in Maulvibazar upazila, 3 in Rajnagar upazila and 4 in Kulaura upazila. The source further added that blood examination of 32,079 persons were conducted by the authorities concerned during the period. The detailed results of blood examination are not available. It may be mentioned here that mosquito menace has assumed an alarming proportion in the district. Drains, ditches full of garbages, stagnant water, ponds with luxuriant growth of waterhyacinths and uncleared jungles in and around the dwelling houses in the town and tea estates help to increase the mosquito menace. [Text] [Dhaka THE BANGLADESH OBSERVER in English 8 Oct 87 p 7] /13046

54500033

BOTSWANA

HUMAN

AIDS DEATHS REPORTED

54000001b Johannesburg THE STAR in English 8 Sep 87 p 5

[Text]

**GABORONE —** There have been 13 confirmed cases of Acquired Immunity Deficiency Syndrome (Aids), in Botswana, a Health Ministry spokesman has announced. He said four people had died of the disease.

All but two of the cases were Botswana nationals and most of the victims were women.

The spokesman called on the people of Botswana to take care to prevent the disease from spreading.

/13046

## PROGRAM TO CONTROL AIDS OFFICIALLY APPROVED

Santiago EL MERCURIO in Spanish 2 Jul 87 pp A1, A8

[Text] The president of the republic has signed a decree approving a specific comprehensive program for preventing and combating acquired immune deficiency syndrome (AIDS).

The above was announced yesterday by Minister of Health Juan Giaconi, who said that 14 AIDS cases had been discovered in the country in the previous quarter, bringing to 42 the total number of cases since 1984, when the virus was first detected in our territory.

Dr Giaconi said during a press conference that 16 of those 42 cases had been contracted in Chile and that so far, 22 people have died of the disease.

He emphasized that the relevant report had been sent to the WHO representative in Chile, Miguel Angel Aguilar.

That report includes all the statistics available through 30 June. He said: "It therefore includes the case of a patient from Brazil who was treated at the Iquique Hospital."

Also present at the press conference were the heads of the Planning Department and the Commission on AIDS, Drs Nestor Montecinos and Daniel Villalobos.

When questioned about the increase of almost 90 percent in the number of AIDS cases between 1985 and 1986, Minister Giaconi said that situation should not cause alarm "because the reported cases reflect the fact that we are just entering the period when the virus manifests itself."

He explained: "Although it is very difficult to make predictions in this area, the probability exists that a similar number of cases will appear over the next few quarters. It must be kept in mind, however, that the increase will be due mainly to the admission of people associated with risk groups in other countries."

In that connection, he pointed out that the number of confirmed cases is broken down as follows: homosexuals: 54 percent; bisexuals: 21.4 percent;

heterosexuals: 11.9 percent; drug addicts: 4.8 percent; and persons infected through blood transfusions: 2.4 percent. He said that no one had contracted the virus through blood transfusions in Chile and that in those cases, the disease had been contracted in other countries.

#### Blood Banks

When questioned about the special anti-AIDS program, he said that the president had signed the decree in question this past 12 June and that the matter was currently being dealt with by the Office of the Comptroller General of the Republic.

In the first phase of that program, activity will be centered on the blood banks in state-owned hospitals in Greater Santiago and the Fifth and Eighth Regions "because the cases discovered have occurred in those zones. Testing will then be extended to all medical centers in the rest of the territory."

The minister said that examinations of this type were being carried out in certain hospitals but that coverage was not yet complete in some of them. He pointed out, however, that the previous control program had been concerned with donors, and he added that the program would now focus on the analysis of stored samples.

As far as funds are concerned, the minister said that approximately 14 million pesos are available for the first phase. It is hoped that the program will go into operation as soon as possible. "I don't think it will be delayed more than 30 or 35 days."

Concerning the danger that Chileans will contract the disease through blood transfusions, Dr Giaconi said the risk "is very low, but we are starting this program to be sure." He also pointed out that in a major university hospital in the capital, only 1 out of 13,000 blood samples had tested positive.

On the question of whether, in order to avoid the danger of infection, it would be advisable for healthy persons to donate their blood--as is done in the United States--so as to have it available if they later need a blood transfusion, Minister Giaconi said that "in view of the fact that most AIDS cases occur in the risk groups (homosexuals and prostitutes), there is no reason for healthy people to do that."

In that connection, he stressed that in the absence of any effective treatment or vaccine for the disease, "I feel that the most important thing is to stick to 'good' sexual behavior."

On that point, the head of the Commission on AIDS, Dr Daniel Villalobos, said that blood donations in Chile do not exceed 100,000, a figure that needs to be contrasted to the large number of Chileans who are fully active sexually. "Every individual needs to be aware of the problem. To a large extent, contracting the disease is a matter of individual responsibility. The Ministry of Health cannot be expected to assume a role that belongs to each individual."

At the same time, Dr Villalobos pointed out that a private system will soon be in operation for people who wish to find out, on a voluntary basis, whether or not they have the AIDS virus. That system is being set up under a plan established by the Latin American Union Against Sexually Transmitted Diseases to provide the tests at cost.

Lastly, Minister Giaconi announced that a serologic census (to determine the presence of the virus) was underway among high-risk groups in the ports of Antofagasta and Valparaiso.

Concerning plans to educate people about the disease, Minister Giaconi said that printed material had been distributed in the various medical centers, and he announced that another sizable quantity of brochures was in preparation. He also stressed the work done in that area by the press.

Concerning the advisability of setting up a system to identify infected individuals at the border, the minister said that "such a procedure is not being considered in the area of international relations except in the case of distant countries such as those in West Europe. Besides, it would have no practical effect, since the characteristics of the disease are such that a certificate loses all validity after 2 weeks."

11798

CSO: 5400/2074



## 100 PROSTITUTES DETAINED IN AIDS ROUNDUP

Santiago LA TERCERA DE LA HORA in Spanish 11 Jul 87 p 9

[Article by Luis Icarte Munoz]

[Text] Antofagasta--A large-scale operation resulting in the detention of over 100 women working in the city's night spots and street prostitutes, including 7 homosexuals, has been carried out by the Sexual Offenses Brigade of the Investigative Police.

The police operation was carried out in response to a specific request by the regional ministerial secretary of health, Dr Nestor Lopez, following a joint meeting held for the purpose of starting a large-scale attack on AIDS in this region. Also participating in the meeting, in addition to the regional secretary of health, were Alda Gavez, regional ministerial secretary of justice; Rolando Waggeman, regional chief of the committees on sexually transmitted diseases; and representatives of Civil Police Headquarters.

According to reports, the roundup was carried out in topless nightclubs, in bars, and on the streets and lasted well into the early morning hours. Its final result was the detention of 103 women and 7 homosexuals who are now being subjected to various tests to determine whether any of them carries the AIDS virus. The possibility that one of them may be carrying the virus has not been ruled out.

The decision to carry out the large-scale raid on the underworld was made as soon as the patient currently undergoing tests at the Regional Hospital to confirm whether he has AIDS told health authorities about his promiscuous lifestyle and his many sexual relations with the city's prostitutes.

It was also announced that practically all the women who were detained had health cards that were up to date but that some of them had not been checked in any way--with the result that they are now undergoing the appropriate tests--and it has been learned that several of the women have been called in for a number of blood tests.

## Patient's Condition

Concerning the patient who is being treated in isolation at the Regional Hospital, the Health Department has issued a new communique stating that there has been no change in that individual's condition and that specialized personnel are continuing to keep a close watch on the patient. Correction or confirmation of the diagnosis is expected soon from the Public Health Institute.

## Did not Have AIDS

Valparaiso--The director of the Van Buren Hospital, Dr David Mahan Marchesse, has denied reports from Santiago that a patient at that hospital died as a result of acquired immune deficiency syndrome (AIDS).

Dr Mahan said that "no one has died from AIDS in this hospital, and the victim referred to in the press report died from an ordinary cause that has no connection whatever with AIDS."

Further on, he reiterated that the person in question was not even a carrier of AIDS because the tests that were carried out--since the possibility of contagion exists for every patient--did not show positive results.

11798

CSO: 5400/2074

CHILE

HUMAN

BRIEFS

NEW AIDS CASE CONFIRMED--Antofagasta--It has been confirmed by the Public Health Institute that a patient at the Oncology Unit of the Antofagasta Regional Hospital has tested positive for acquired immune deficiency syndrome (AIDS). The announcement was made by Dr Nestor Lopez Perez, substitute regional ministerial secretary of health and director of the Antofagasta Health Department, in connection with the case being handled by specialized personnel from the Health Department. The official also said that work is continuing on the blood samples that were taken from 120 individuals considered to be in the high-risk group and sent to the Center for Sexually Transmitted Diseases (STD's). [By Luis Icarte Munoz] [Text] [Santiago LA TERCERA DE LA HORA in Spanish 15 Jul 87 p 15] 11798

CSO: 5400/2074

## AIDS INCREASING ONLY WITHIN KNOWN RISK GROUPS

54002408 Copenhagen BERLINGSKE AFTEN in Danish 9-15 Oct 87 pp 1, 8

[Article by Ojvind Kyro: "AIDS Not Spreading As Feared"]

[Text] There are reassuring figures from the blood banks: AIDS is not widespread in the heterosexual population, a study of 600,000 units of blood shows.

AIDS is not spreading as feared in the heterosexual population. Or, put more colloquially, the "gay plague" is hardly as double-barreled as it was presumed to be.

Since January 1986, when donor blood began to be screened for antibodies, only 12 infected units have been discovered, and all of these came from people with so-called risk behavior: gays, intravenous drug users, bisexuals and people who have returned from Africa.

The decisive question in the AIDS epidemic has been whether the deadly disease, for which there is no cure, would spread from the risk groups to the heterosexual population. Even if epidemiologists have called for a study of a representative segment of the population in order to ascertain how widespread infection is, this has never been undertaken. Thus far there have been guesses that between 10,000 and 15,000 people are infected.

But the first tentative reply to the question has now been given with the publication of the annual report of the Voluntary Blood Donors Corps of Denmark. The Donors Corps, which counts a mere 300,000 members in the entire country, is fairly representative of the entire Danish population. 400,000 units of blood are given annually, and all are screened for antibodies.

In addition to preventing patients from contracting AIDS through blood transfusions, screening donor blood also gives a picture of how widespread the AIDS virus is in the population.

"What goes on is really a public screening," said Valborg Sandberg, office manager of the Voluntary Blood Donors of Denmark, "and we are pleased to have found so few positive units. There is nothing to indicate that AIDS is spreading to heterosexuals."

Valborg Sandberg explained that, based on results from other countries, the expectation was that one infected unit would be found for every 10,000 donations. "As of today, 600,000 units have been screened, and according to the calculations, there should have been 60 positives. But fortunately only 12 were found."

### Reassuring Figures

Two years ago blood donors with "risk behavior" were advised to stop giving blood. Thus today the Donor Corps is presumed to be made up to heterosexuals who have not had sexual relations in Africa and who are not intravenous drug users.

"The heterosexual spread of the infection is very limited," said Dr Michael von Magnus of the Public Health Service. He divided the spread of the infection into the "first generation"--i.e. people infected by risk groups--and the "second generation"--people infected by people from the "first generation."

"We haven't found any other generation of infection in Denmark," von Magnus said, "and studies of screening clinics also show that no explosive spread to the heterosexual population is happening."

But even if the figures are reassuring for heterosexuals, the information and cautionary campaign is in full swing. "There is always a risk, and we really don't know where we stand. You can't always be certain, and so we must still warn heterosexuals, even if the risk is small," Michael von Magnus said, adding: "Balance in the information campaign is incredibly difficult. We can neither tell people they must be celibate nor that there is no risk. We must provide information about the disease so that each individual is able to look after himself and after others. That's why we are now directing our efforts particularly at drug users, gays and bisexuals, and we are also following up on the instructional activity in the schools, and are working to raise the level of information in the entire population."

Discovery of the limited spread of infection raises new questions in the AIDS riddle: In Africa, why does AIDS strike just as many men as women, as many homosexuals as heterosexuals? An international conference on AIDS is currently underway in Naples, and at that conference new research reports on this murky question are being presented.

A second question is: Does the limited spread of infection mean the information campaign has worked? It got underway just a year ago, and some studies show that ignorance still prevails among the population.

### Denmark Tops The List

Other data indicate that information has seeped into certain parts of the population and that they have altered their sexual life style. For example, the number of men with gonorrhea in Copenhagen has been cut in half in two years, from 1,949 in 1984 to 1,080 in 1986.

However, Denmark is still at the top of European statistics, when the number of AIDS patients is compared to the size of the population. As of 1 October in Denmark, there were 202 AIDS cases, of which 105 had died.

The cases were distributed as follows: 165 homosexuals or bisexuals; 4 intravenous drug users; 4 drug users, who are also homosexual; 8 who were treated for hemophilia; 3 by blood transfusion; 9 by heterosexual contact (in Africa, among other places); 2 children via their mothers; 7 for unknown reasons.

12789

## AIDS INFECTION REACHES GREENLAND FROM DENMARK

54002405 Copenhagen INFORMATION in Danish 28 Sep 87 p 5

[Article by Anne Brockenhuus-Schack: "AIDS Campaign In Greenland To Run On Only Two Letters; Name Of A New Condom To Play A Major Role"]

[Text] "AN" will be the name of a new brand of condom in Greenland. It is to be launched here this fall in connection with the planned Greenlandic AIDS campaign. The name is the abbreviation for the Greenlandic "AIDS Naamik," which means "No To AIDS."

The campaign, which will be aimed at school children as well as the general population, will start at the end of October or the beginning of November.

Instructional materials for school children and supporting materials for all teachers have been prepared, and there will be follow-up to the campaign, which is being run by the Greenlandic Prevention Council, on school radio and videofilm.

In connection with the traditional Greenlandic summer "living on the land," which in particular brings many youth together, the theater group Silamiut [Nature's People] performed four one-act plays about AIDS. These will now be recorded on videotape and distributed to all school libraries in Greenland, i.e. 40 copies.

The abbreviation of the name of the condom will be used as a teaser, and initially there will be a bit of a mystery as to what the two letters stand for.

An untraditional means of distributing the condoms will also be resorted to --earlier there was talk of supplying them for free with change in taxicabs-- the price is to be low, and everyone will be able to acquire them.

Frank Senderovitz, the dentist who is the chairman of the Prevention Council, told INFORMATION that next year the council will have its budget doubled, so the contribution by the Danish state will be about one million kroner. At the same time, monetary support is expected from the Home Rule Government, which views AIDS as a serious and major problem.

"The economic situation has now gone from bad to reasonable, allowing us to carry out longer-range preparations. And our starting point is certainly unique: We do not have the disease in Greenland."

There are people in Greenland who have been infected with AIDS, but they were infected in Denmark. And the figure has not risen, according to this spring's screening study. The syphilis situation is still a problem in Greenland, inasmuch as there is currently talk of an epidemic. However there are no newer figures than those from the summer.

Preventive work as well as expanded efforts to fight sexually transmitted diseases are items currently being discussed by all district physicians in Greenland; two physicians from the Public Health Service are also taking part in these discussions.

12789



## CHOLERA CASES REPORTED IN ALEXANDRIA

Cairo AL-SHA'B in Arabic 28 Jul 87 pp 1, 2

[Article by Samir Sharbash and Tareq Ismail]

[Text] Alexandria--In a rapid and serious development 35 persons, including some Central Security soldiers, have died of cholera in Alexandria over the past few days.

An entire company at the Central Security training camp at Mirgham, west of Alexandria, was taken to the Hummiyat Hospital at al-Hadarah Wednesday evening after 150 soldiers had suffered from vomiting coupled with diarrhea causing panic among the 20 thousand soldiers who are stationed at the camp.

The Ministry of Health declared a state of emergency at all Alexandria hospitals, following the failure of the Hummiyat Hospital to accommodate the 150 soldiers, due to lack of facilities. A large number of these soldiers were transferred to the University Hospital.

Furthermore, Hummiyat Hospital had to release several civilian patients who had not yet completed their treatment to make room for the Central Security soldiers. These civilian patients are suspected cholera cases.

After rushing to the Hummiyat Hospital, state security investigation teams and police forces sealed off the hospital, deployed inside the wards and corridors, and prevented visits in a bid to stem leaks about the disease, and in anticipation of possible clashes with the families of the patients who were released before completion of their treatment.

Meanwhile, several Central Security soldiers now under treatment told AL-SHA'B that they had to drink water from a canal near their camp and that they had to wash their clothes and dishes in the same canal which is polluted by sewage and factory waste. This came about after the commander of the camp had ordered them not to use the water or the bathrooms in the camp, and they had to defecate on sheets of paper which they then threw into the canal, they said.

Revealing another shocking example of the abuse to which they are subjected, the soldiers said the meals given to them are not suitable for human consumption. Canned food is distributed long after the expiration date.

Inside the Hummiyat Hospital, particularly in a ward undergoing final construction work, we saw some weary and fatigued Central Security soldiers lying in beds which were in extremely bad condition. Some lay on the floor.

Meanwhile, the Alexandria Health Authority instructed all health offices to take samples from the areas in which cholera cases were reported and to conduct a comprehensive survey, particularly in the al-Nuzhah and al-'Attarin areas where several cases were reported.

A reliable hospital source who declined to identify himself confirmed positive cholera cases among Central Security soldiers which resulted in 20 deaths. The source also confirmed that case number 8889 in the hospital was identified as a woman who died of cholera. Case numbers 9048, 7449, 7460, 7461 and 7462 all are cholera cases, according to laboratory tests.

Despite the gravity of the situation, the Ministry of Health, including the minister himself, Raghib Duwaydar, maintains its false claim that there is not a single cholera case in Alexandria. This claim came in a statement made by the minister of Al-AHRAM newspaper last Wednesday, in response to reports published in the latest issue of AL-SHA'B concerning the existence of cholera cases in Alexandria.

13136/9738  
CSO: 5400/4612

## AIDS EXPERT: COUNTRY'S CASES ON LEVEL WITH FRANCE, FRG IN DECADE

## Michael Koch's Claims

Helsinki UUSI SUOMI in Finnish 14 Apr 87 p 11

[Article by Sinikka Mustonen: "AIDS Expert Koch's Somber Appraisal: Finland on Level With France and Germany in 10 Years"]

[Text] In 10 years Finland will be in the same position that France and Germany are in now. Those countries have 1,000-2,000 AIDS patients, and already there are problems in providing them with treatment. But in the United States, France, Germany, Africa, and Central America, the situation will be catastrophic 10 years from now.

Michael Koch, a well-known Swedish expert on AIDS, assessed the effects of the disease.

"At present it wouldn't pay to institute nationwide testing in Finland, because the virus probably hasn't spread much here. But the entire population of some small city--Oulu, for example--should be tested. If an unexpectedly large number of HTLV infections turn up there, then testing should be expanded."

Koch thinks that at the very least the entire populations of Haiti, Central Africa, and certain South American countries such as Trinidad ought to be tested immediately.

"We can no longer speak of high-risk groups there," stresses Koch.

## Infection Hard to Detect Early On

One of the worst problems, in Michael Koch's view, is that the HTLV infection is difficult to detect in its early stage. On top of everything else, we have recently learned that this period of undetectability can be quite long. In that case, the infection cannot be revealed in antibody-based tests.

## HTLV Imported From Africa

"We have seen what happens when those who have worked in Africa return. Perhaps 2 percent of the Germans and Americans who worked on developmental assistance projects in third-world countries during the early days of AIDS became infected.

"But not long ago 200 Danes returning from Africa were checked. The test was offered to everyone, but only 81 agreed to take it. Seven of them, or 8 percent, were infected. We don't even know how many of the remaining 120 were.

"That 8 percent is an alarmingly high figure. All of them had had sexual contact with African women, some with prostitutes, some with other women.

"It is clear, in any event, that heterosexual infections are being brought back from Africa on a large scale," notes Koch.

#### Incubation Period as Much as 14 Years

At the same time, it has been shown that the incubation period continues to grow. There have now been cases in which the infection occurred 13-14 years ago. Among the returnees from Africa, there are some who were infected 5 years ago--and they are still very healthy.

"The future looks bleak. After all, everything has begun much earlier than expected."

#### Venereal Diseases Must Be Avoided

In Koch's opinion, now is the time to turn back the clock on sexual freedom. With the coming of penicillin and other antibiotics, people have lost their fear of venereal diseases. But antibiotics do not necessarily eradicate the newest venereal diseases. Especially not AIDS.

#### Individual Forced to Decide on Risks

"We must accept these diseases once and for all and begin to live accordingly. But it is not up to the state to decide for the individual which risks he or she should take."

Although Koch is skeptical about the power of the word to guide human conduct, he nevertheless believes it is the state's duty to tell about AIDS.

"And we shouldn't conceal a certain sense of uncertainty. We've only known about the disease for 5 or 6 years. We're still not very well acquainted with it, and we therefore cannot say for sure that you can't get infected this way or that way," says Koch.

He points out that so far nearly all the sure "facts" have been refuted. It was said at one time that it would take a deep needle prick to infect a health care worker, but that notion has now changed. As knowledge has increased, so has uncertainty.

## Testing Urged for Travelers

Helsinki UUSI SUOMI in Finnish 14 Apr 87 p 11

[Article: "Tampere University Student Council Demands Mandatory AIDS Tests for Travelers Abroad"]

[Text] TAMY, the student council of Tampere University, is demanding mandatory monthly AIDS tests for businesspersons, bank managers, cabinet ministers, foreign correspondents, and Foreign Ministry officials who travel abroad a lot. The students base their demand on the notion that members of these professions are "notorious for seeking out the services of a prostitute when they travel abroad."

According to the TAMY statement, prostitutes are the most significant source of the disease AIDS among heterosexual high-risk groups. For example, more than half the prostitutes in Hamburg carry the HTLV virus.

The statement signed by the TAMY chairman and first secretary also urged AIDS tests for all businesspersons, bank managers, foreign correspondents, civil servants, and cabinet ministers who come to Finland from abroad. Foreign and economic relations cannot be placed above the entire nation's health, according to the statement.

12327

CSO: 5400/2403

## BRIEFS

CHOLERA EPIDEMIC AFFECTS 1,200--Bissau, 14 Oct (ANG/PANA)--The cholera epidemic prevailing in the Guinean capital since the end of September has now affected all regions of the country, with 1,200 cases recorded, the director general of public health, Venancio Furtado, disclosed today. According to Mr Furtado, most of these cases have been recorded in the suburbs of Bissau (574 in all), while 85, 256, and 32 cases have been recorded in the Oio, Biombo, and Quinara Regions respectively. These cases resulted in 31 deaths, some of them before the special medical teams arrived in the areas affected. The Guinea Bissau public health director, however, stressed once again that the country's authorities have succeeded in bringing the situation under control. [Excerpt] [54000003b Dakar PANA in French 1738 GMT 14 Oct 87] /9274

## EXCHANGE OF MEDICAL EXPERTISE WITH VENEZUELA UNDER WAY

54000006a Georgetown GUYANA CHRONICLE in English 20 Aug 87 p 1

[Text]

A Venezuelan delegation of medical experts comprising Dr. Manuel D'Elias Obejon, chief traumatologist; Dr. Franklyn Montes, chief urologist; and Dr. Jose Rodriguez Lezana, traumatologist, recently concluded a five-day visit to Guyana. During the visit, the delegation held extensive talks with the Minister of Health, Dr. Noel Blackman, and other officials and physicians of the Ministry of Health.

The discussions centred on the development of various health programmes between Guyana and Venezuela which involved the exchange of expertise and technology by the two countries.

According to Dr. Blackman, there are specific programmes being

developed which would result in medical personnel being sent to Venezuela for graduate and post-graduate studies and training on both short and long-term basis.

Plans are also in train to bring in professors from Venezuela to complement the staff at the University of Guyana Medical School and to teach at the Government hospitals.

It is also envisaged that programmes to enhance diagnostic capabilities would be developed by a medical engineer who is expected to arrive soon from Venezuela. This medical engineer would also train staff and advise on the reconditioning of equipment.

These arrangements arose out of a visit by Minister Blackman to Venezuela early this year.

/13046

## HEALTH SECTOR DEVELOPMENTS OVER PAST 6 YEARS REVIEWED

54400006b Georgetown NEW NATION in English 30 Aug 87 pp 4-5

[Text]

THE establishment of the Medical School at Turkeyen, the development of regional health facilities and the establishment of numerous health centres, have been among the developments in the health sector over the past six years.

The Medical School was established two years ago with assistance from the Pan American Health Organisation, the Cuban Government, Mexico, Canada and a number of leading Guyanese medical practitioners. Among the Guyanese were Dr. Marjorie Jones, Dr. Roger Luncheon and Dr. Derry Harry — the current head of the Medical School.

Dr. Richard van West-Charles, who recently resigned as Minister of Medical Education, Environment and Food Policy to pursue post-graduate studies at the University of Michigan, explained that the idea of a medical school was put forward by Founder-Leader Cde. Forbes Burnham in 1983. The school was opened by President Desmond Hoyte on October 31, 1985.

He sees as being among the significant developments in the field of health, the decentralisation of the health service in keeping with the policy of regionalisation, the

provision of a nationally improved health service, the rehabilitation and upgrading of the various hospitals in the region, the training of numerous health personnel, and the installation of modern equipment in the regional hospitals.

The West Demerara Regional Hospital, and the others at Wismar, Kumaka, Aishalton, Charity and Mibicuri have all been equipped with senior medical practitioners. Most now have X-ray and other laboratory facilities, thereby strengthening the diagnostic capability in the regions and reducing the pressure on the referral hospital in the city.

At Bartica, Wismar, and Lethem, facilities for conducting operations have either been rehabilitated or installed. Regional health clinics and health centres have been set up where these did not exist.

The additional facilities meant more staff. The Ministry of Health therefore had to embark on a massive training programme. More than 80 regional personnel have been trained in the Community Health Worker programme. One of these, Albert Brazilio of Waramadong, has since found his way into the Medex training programme. Some of



those graduating from the Medex programme are now being trained at the Medical School to qualify as doctors.

Maternal and Child Care have greatly improved. Recently, the Georgetown Lions donated a quantity of equipment to aid in measuring the haemoglobin count of expectant mothers. These are to be distributed countrywide.

Dr. Van West-Charles, in an interview with New Nation, noted that more recently the emphasis has been on preventive rather than curative medicine.

Immunisation and training in public health practices became national priorities during the decade.

Today, polio is non-existent in Guyana and there has been a marked reduction in the incidence of tetanus. Regional hospitals and clinics have been provided with facilities for storing vaccines.

For example, clinics at Mahdia, Mabaruma and Waramuri have all been provided with solar refrigerators to aid in the storage of vaccine.

Efforts are being made for the development of a stronger information base in the health sector. Last year, a series of workshops were conducted to address issues of planning and programming.

Training has also been conducted for the regional health management teams.

/13046

GOVERNMENT MINISTER VAN WEST-CHARLES RESIGNS TO STUDY IN U.S.

54400006c Georgetown GUYANA CHRONICLE in English 20 Aug 87 p 1

[Text]

Dr. Richard Van West-Charles has been awarded a PAHO Fellowship to pursue postgraduate studies at the School of Public Health, University of Michigan in the USA, leading to the Master of Public Health degree, a field in which he has taken a special interest over the years of his ministerial service.

The Ann Arbor School of Public Health in Michigan enjoys an internationally recognised standing.

The Fellowship begins next month, and will extend to August 1988.

For the purpose of enabling him to pursue his studies, Dr. Van West-Charles will be relinquishing his office as a Minister of the Government and a Member of Parliament, though he will continue to be a member of the Central Executive Committee of the People's National Congress while abroad.

/13046

## ANTIMALARIA EFFORTS CONTINUE, THOUGH DECLINE IS CITED

## Report on Public Meeting

54400006d Georgetown OPEN WORD in English 24 Aug 87 p 4

[Text]

Citizens at the well attended PCD open classroom, "Malaria: A National Responsibility," held last Thursday evening at the City Hall received much distressing information but little comfort from a panel of Drs. Keith Carter, Roger Luncheon and Marcos Barros, visiting Brazilian specialist. Fr Malcolm Rodrigues chaired.

It was revealed that malaria had risen from 2000-plus cases in 1982 to 17,000-plus at July 1987. Dr Luncheon pointed out that the actual level was really five times that number since they calculate about 5 non-reported cases to each one reported. There were 28 malaria cases reported in 1975.

It was revealed that while some malaria drugs had been received, they were available in Georgetown and not in the interior areas where the disease is most intense.

It was revealed that there was no longer a policy of eradication but one of control, but neither of the two Guyana government doctors was able to say what the long- or short-term plans of control were. The audience learned that the DDT spraying of the past was no longer effective because of the different strain of mosquito which was now posing the problem. It was also pointed out that where malaria was endemic, like in Guyana, there is no

real use in taking preventative drugs. On more than one occasion, the Health Ministry representative, Dr Luncheon, declared that he was unaware of any statute which would allow the Ministry to declare a national state of emergency with respect to malaria. He described its programme as one which was "marching behind the malaria". He said "malaria was here to stay".

#### Minister's Remarks

Georgetown GUYANA CHRONICLE in English 2 Sep 87 pp 4-5

[Text]

MALARIA cases appear to be on the decline, but Senior Minister in the Ministry of Health Dr. Noel Blackman warned against complacency when he visited the Mazaruni/Petaro region on Monday.

On arriving at Kurupung, Minister Blackman and his team of health officials were met by Community Health Worker, Janet Husbands, who showed them around the community. The team was satisfied that the structures were sprayed with DDT and reports from the residents said the exercise was effective against mosquitoes in the area. The Minister nevertheless warned that the need still exists for the residents to be educated in the various aspects of malaria prevention and health and sanitation.

Senior Health Education Officer, Sarah Gordon and Health Education Officer Norma Howard went around visiting homes, instructing the residents about preventive measures to avoid the threat of malaria infection.

At Tumerang, the Minister was told that there were a few cases of falciparum infection which were treated and have since shown signs of improvement. However, it was noted that at the

miners' camp visited by the Minister, there were no walls to the structures.

It was explained to the miners that this would render the spraying of DDT ineffective and as such they were advised to put walls around their sleeping and living quarters.

The importance of reinforcing health education was stressed by the Minister. He also said that more Community Health workers should be trained to work in these areas.

At Issano, the health services appeared inept. The Minister noted that spraying was hardly done. In fact the health personnel were not around. But there was enough DDT available. It was explained that a medic was on his way but the truck in which he was travelling had broken down on the trail.

Minister Blackman pointed to the need for a health complex to be established there noting that the area was densely populated. In this respect, the Minister has undertaken to put together a comprehensive programme for Issano and other areas.

The team also visited the Amerindian village of Tassiri where six suspected malaria cases were noted. The Minister made available a quantity of anti-malaria drugs to the Captain, and a

member of the Tassiri local authority, David Joseph was brought to Georgetown by the Minister, to undergo three-weeks of training, after which he would return to his village to assist in health care there.

The training of persons from the villages to offset the shortage of health staff within those areas would be an ongoing exercise, the Minister said. He also called on those health officials within the area to start identifying suitable candidates.

According to Minister Blackman, the decrease in the malaria threat is the result of the implementation of an emergency plan from

the first week of July.

The plan consisted of rapidly training and mobilising human resources to combat malaria in various parts of the country.

The plan also involves mass smearing, treatment when positive cases are found and the spraying of structures with DDT. There was also an education component which would make the community aware of the methods of malaria prevention.

The Minister noted that significant success has been achieved as seen from his visit to Kurupung, Enachu and Issano. But there is still the need for a maintenance programme.

#### PAHO Grant

Georgetown GUYANA CHRONICLE in English 2 Sep 87 pp 4-5

[Text]

*SENIOR Minister in the Ministry of Health, Dr. Noel Blackman yesterday confirmed that a grant of \$100 000 [US] has been made to the Ministry of Health to help in the campaign against malaria.*

*This grant is expected to provide the Ministry with outboard engines, drugs and vehicles.*

*Dr. George Alleyne, the Head of the Health Programme for Development at PAHO in Washington will be coming to Guyana on Friday and, among other things, he will discuss with the Guyana Government the disbursement of the grant.*

#### Defense Force Involvement

Georgetown GUYANA CHRONICLE in English 9 Sep 87 p 5

[Text]

A team of medical personnel from the Guyana Defence Force Headquarters at Camp Ayanganna last week visited the Matarkai Garrison to assist in the malaria eradication campaign.

The team comprising Lt. Hussain, Warrant Officer Williams, Staff Sergeant Noble, and Sergeant Smith, assisted Medex Douglas at Port Kaituma in treating patients. They also helped in an exercise to spray homes of residents at Port

Kaituma and Arakaka.

Army personnel based at Mabaruma also did spraying.

And a quantity of drugs were handed over to Medex Ken Davis of the Pakera Hospital at Matthew's Ridge on September 4, by the Chief Administrator of the Matarkai Garrison, Lieutenant Colonel Hartley Liverpool.

The drugs were a donation to the Matarkai Garrison by the Chief-of-Staff, Major General Norman McLean.

## GOVERNMENT GETS REPORT ON REVIEW OF IMMUNIZATION PROGRAM

54400009a Georgetown GUYANA CHRONICLE in English 12 Sep 87 pp 4-5

[Text]

A Joint Multi disciplinary Review of the Expanded Programme on Immunisation (EPI) in Guyana, with recommendations for a five-year plan beginning next year, was submitted to the Ministry of Health yesterday.

Participants in the review briefly reported to Senior Minister in the Ministry of Health, Dr. Noel Blackman, on some of the problematic areas noted in their find-

ings. This survey, which lasted three weeks, was conducted in Regions 1,4,6 and 9.

It was reported that the immunization programme was affected by a lack of information on the population in the regions, the need for management, the need for training of personnel, storage of vaccines, and transportation of personnel in the fields.

The survey team comprised Mr Henry Smith of PAHO in Trinidad and Tobago, Dr Roy West of CIDA, T. Clarke of PAHO in Jamaica, Diana Francis-Delaney from St Christopher-Nevis and 15 Guyanese, most of whom are nurses. Also present during yesterday's handing-over were representatives of UNICEF, the Rotary Club, and the Canadian Government who hope to be able to assist with resources in implementation of the five-year plan.

Conducting this survey involved filling of questionnaires by regional medic centre personnel and speaking with parents of children eligible for immunisation.

The review team stated that throughout Guyana there is a dedicated cadre of nursing staff performing with limited resources.

/9274

## NEW VACCINE FOR BABIES IN FIGHT AGAINST HEPATITIS

54500030 Hong Kong SOUTH CHINA MORNING POST in English 29 Sep 87 p 1

[Article by Lulu Yu]

[Text]

IN an attempt to curb the spread of hepatitis B, a lethal virus carried by 10 per cent of Hongkong's population, all newborn babies will be inoculated with a yeast-derived vaccine from the middle of next year.

The hepatitis B vaccination advisory committee has recommended the move following calls by a Legislative Council medical panel that all 800,000 babies born each year be inoculated.

A spokesman of the Medical and Health Department said yesterday the new yeast-based vaccine would replace the existing plasma vaccine because it was cheaper.

"Since both vaccines have proven to be equally efficacious and safe the yeast vaccine was procured recently as a result of the latest tendering exercise," he said.

At present, only babies born to mothers known to be carriers of the hepatitis B infection are given the vaccination at Government and subvented hospitals.

The extended immunisation scheme will cover about 65,000 infants born in these hospitals. The number includes those referred to Government maternal and child health centres by private hospitals.

Some 92 per cent of all newborn babies will be vaccinated in the centres. The rest will go to private doctors.

Babies born to mothers who are carriers will be given hepatitis B immunoglobulin (HBIG) for extra protection.

The cost of the scheme is estimated at \$10.5 million, which includes vaccine and screening. The spokesman said the figure, which does not cover costs for the HBIG vaccination, was likely to be higher by next year.

Since inoculation for high-risk babies and health workers began in 1983, about 100,000 babies, or one in eight born, are immunised every year.

Half of the adults, 10 per cent of the children and 11 per cent of all pregnant women in Hongkong are carriers of hepatitis B.

Doctors have suggested that a quarter of the adult carriers would die from liver diseases and infants stand a 90 per cent chance of getting it from carrier mothers.

Liver cancer is the second most common cause of cancer death in Hongkong, after lung cancer.

A spokesman for the department said many infants were infected by the disease during birth from their mothers who were carriers,

while others were infected in infancy and childhood due to inter-family contamination.

"Therefore, even if mothers are not carriers, there is still a risk of infection in early life," he said.

He said the new yeast-based vaccine was safer than the plasma vaccine because it did not depend on blood donors, who could be carriers of the killer virus AIDS.

The yeast vaccine, however, has been condemned by medical experts as untried and potentially dangerous.

A liver specialist earlier warned of side effects which could cause complications such as headaches and fever.

He said it had only recently gone on the market and fewer than 10,000 people were known to have used it since clinical trials began four years ago.

By contrast more than six million doses of the plasma vaccine had been used since its development in 1977.

[Box, p 1]

**HEPATITIS** is an inflammation of the liver, usually caused by two viruses identified as hepatitis A and hepatitis B. Type A can be contracted through contaminated food but is not dangerous.

Hepatitis B kills two million people world-wide every year, and is 100 times more infectious than the deadly AIDS virus.

It is believed to have caused 90 per cent of the 1,000 cases of liver cancer deaths in Hongkong, and two-thirds of the 400 deaths from liver cirrhosis every year.

Infection can come from contact with blood or any body secretions. Vaccines only prevent contraction of

the disease. No cure has yet been found.

Mother-to-baby infection is considered to be the major form of hepatitis B infection in Hongkong and most of Asia.

Reports show that up to 15 per cent of Asians are chronic carriers of hepatitis B. About 90 per cent of the Asian population would have been exposed to the disease by the age of 20.

One in four carriers would eventually die of liver cancer.

The early symptoms of the disease are fatigue, nausea and loss of appetite, followed by jaundice, darkened urine, soreness of the abdomen and discomfort round the liver. The recovery stage is marked by a reversal of the earlier symptoms.

/13046



## CONTINUING REPORTAGE ON AIDS PROBLEM IN HONG KONG

## First of Monthly Reports

54500029 Hong Kong HONGKONG STANDARD in English 23 Sep 87 p 3

[Article by Shirley Yam]

[Text]

THE first in a series of monthly reports on AIDS yesterday identified nine more carriers of the killer disease.

Quarterly reports from the Medical and Health Department have been replaced by the more frequent information following accusations that the department was being tight-lipped over the disease.

In announcing the statistics the department said that it would be a monthly practice from now on "in view of the public interest in the local development of AIDS."

Of the new carriers, one is a woman and five are known to be Chinese. Six caught the virus through sexual contact, while two are haemophiliacs and had it passed on to them from blood transfusions. One is said to have got the virus from an unknown source.

Five of the cases were detected in government hospitals or clinics, two by private practitioners and two were referred by haemophiliacs.

The work of testing for the disease is carried out by the department's virus unit which, to date, has identified 100 people as being HIV antibody positive.

The latest nine carriers were identified in the past two months

during which 6,857 people had their blood tested.

Of these 335 came from the private sector which, according to a department spokesman, showed the extent of infection in this sector had remained low.

Of the total number infected, five men and one woman have died. Of them three were Chinese. The woman was believed to have been a Filipino barmaid. They were understood to have been infected through sexual contact and three of them were homosexuals.

As earlier reported in the *The Standard* a suspected AIDS patient was being examined at the Queen Elizabeth Hospital.

The Hongkong Red Cross reports that no recent blood donors were found to be infected.

Since April 1985 the Red Cross had carried out a mass screening programme and so far only five infected donors had been detected.

While nurses' groups had expressed fears of catching the disease none of the 323 health care personnel tested were found to be infected.

Unlike most Western countries Hongkong had not identified any intravenous drug abusers as being AIDS carriers. Haemophiliacs continue to be the group worst hit.

Hong Kong SOUTH CHINA MORNING POST in English 24 Sep 87 p 3

[Article by Simon Macklin]

[Text]

ONE-third of the 100 Hongkong people known to have been infected with the AIDS virus were exposed through homosexual or bisexual activities, new figures provided yesterday by the Medical and Health Department show.

The figures also show that 29 of the infections involved expatriates or non-Chinese people.

Thirty-four people are suspected to have contracted the disease through homosexual or bisexual activities.

And another six people are believed to have caught the potentially lethal virus from heterosexual activities.

But 49 of those who contracted the acquired immune deficiency syndrome were haemophiliacs who received transfusions of blood products that were infected with the virus.

A further three people are thought to have been infected with the virus from blood transfusions. It is not known how the remaining eight cases were contracted.

Of the 100 people who were shown to have the virus, only six have so far contracted the disease while the other 94 are AIDS carriers.

Most of those who tested positive were men, with only three women reported to have the virus.

Two of the women reported to be carriers are believed to have contracted the virus through blood transfusions. The third case was a Filipino woman who died of the disease in July.

Twenty-two of the cases were reported by doctors in private practices while 20 were from Government hospitals and clinics. Only nine were from Government social hygiene clinics and the remaining 49 cases were haemophiliacs.

The figures also show that 77 of the cases are adults while the remaining 23 are children.

All but one of the children were haemophiliacs who had contracted the disease through transfusions of infected blood products.

The remaining child contracted the virus from a blood transfusion.

Medical and Health Department officials say stringent screening procedures now mean it is almost impossible for AIDS-infected blood or blood products to be administered to a haemophiliac in Hongkong.

Clotting agents derived from blood plasma which are administered to haemophiliacs are imported from the United States.

The relatively low number of haemophiliacs in Hongkong would not make it cost-effective to produce the blood products in the territory.

But Medical and Health Department officials say they are confident the rigorous screening processes used in the US would immediately identify any AIDS-infected blood.

And not only are all blood products screened, they are also heat treated to kill all viruses.

Officials at the Medical and Health Department say the screening and heat treating processes used in the US meet all international safety standards.

No new AIDS cases have been reported among haemophiliacs in Hongkong since the screening practice was adopted.

The Medical and Health Department has agreed to publish the number of AIDS cases identified in the territory every three months.

Hong Kong SOUTH CHINA MORNING POST in English 26 Sep 87 p 15

[Article by Mary Ann Benitez]

[Text]

**W**ORLDWIDE panic on AIDS has resulted in the passage of laws in Western countries which punish carriers who knowingly transmit the disease to other people.

Legislation is understandable, given the rate at which the virus was being spread and its known transmission routes.

But enforcement of the law is not without its problems. In New South Wales, Australia, no doctor has yet been punished for his failure to notify the health authorities of a diagnosed AIDS patient, and no carrier of the virus has been prosecuted for knowingly transmitting it.

While there is no such legislation in Hongkong, the head of the AIDS "think-tank", Dr S.H. Lee, has admitted that the known AIDS cases here are just the "tip of the iceberg".

For every carrier detected, 10 people have already been infected. No mathematical acumen will be needed to arrive at an intelligent guess that the spread of AIDS is geometrical in proportion.

Hongkong has on record 100 known carriers, and six of these have already died. But its screening program through the use of an Elisa test was only launched in 1985 and there is no telling how many more people, fearful of knowing they are harbouring the virus and coming face to face with death itself, have not come up to be tested.

The World Health Organisation estimates that as many as 100,000 people in the United States, Europe, Africa, Asia and the Pacific have been exposed to the AIDS (Acquired Immune Deficiency Syndrome) virus that destroys the ability to fight disease.

But the incidence of exposure is probably under-reported in many countries, a WHO official said.

For the moment, Mr Lee and his advisory committee on AIDS have ruled out legislation

to control the spread of the disease because of what they perceive to be difficulties in enforcing the law.

But as the number of carriers becomes increasingly significant and given a panicky population living in a high-density area, it would only be a matter of time before the issue of legislation enters the AIDS debate, now mainly dominated by whether homosexuality should be decriminalised so that high-risk groups would not be fearful of being tested, and whether the education campaign is going in the right direction.

As with all laws, pro-legislation groups emphasise that the deterrent effect is an overriding consideration.

Britain's *Guardian Weekly* wrote: "It is not hysterical to penalise as a crime the wilful exposure of unknowing people to this virus."

"It (legislation) is likely to be no more of a deterrent than any other criminal penalty, but it is basic, ordinary justice."

A lecturer at the University of Hongkong's Criminology Group, Mr Ellis Cashmore, does not believe that legislation would work, fearing that it would lead to "police state activities."

"The problem is, how do you legislate for such a thing as AIDS?" he asked.

Will legislation help to stop carriers from knowingly infecting others?

A test case is being heard in a British court which involves a prostitute who, despite knowing she was an AIDS carrier, continued with her profession thereby infecting other people. The woman is charged with manslaughter, a reduced charge from murder.

Even the Soviet Union has announced that a person with the virus who continues to have sexual contact with others faces up to five years in jail. If the virus is transmitted, the penalty increases to eight years' imprisonment.

In Florida and Idaho, it is now an offence wilfully to expose another person to the AIDS virus.

Colorado passed new AIDS reporting laws, carrying a fine of US\$300 for failure to do so.

New South Wales quietly passed legislation in May this year requiring doctors to make the disease notifiable. The bill met with stiff criticism when it was tabled in August 1985 before being resurrected this year.

But, enforcing these laws is difficult because health authorities know that the reporting system works better by relying on the cooperation of doctors rather than on the law's coercion.

Proving a person has knowingly transmitted AIDS is also difficult because of the virus's long incubation period.

Civil damages claims in the United States are sprouting, sometimes out of quite comical situations. In a San Diego clash between police and gay marchers, Mr Brian Barlow, aged 29, of San Francisco, was arrested after biting two police officers. Although he told the officers he had the virus, he stubbornly refused to submit himself to the AIDS test.

One of the police officers is suing for US\$500,000 damages out of fear he might have been infected by the bite.

Hongkong University's Mr Cashmore said the approach should be more educative but not the kind of "blanket scare campaign we are now seeing in Hongkong." He would like to see here a campaign specifically targetted to the high-risk groups of homosexuals and intravenous drug addicts, as is happening in Britain.

But he said until homosexuality was decriminalised in Hongkong, this sort of campaign could not be conducted successfully here.

"I would prefer a campaign which is based not so much on the individual but on an individual's responsibility to his family, to think of his loved ones whom he will leave behind because of his activities," said Mr Cashmore.

A Catholic teacher on ethics, Father Peter Brady, said the best protection against AIDS was for people to lead a "moral life."

He said condom advertising should tell the truth about the failure rate of the condom as a birth control method and more so as a protection against the AIDS virus.

At some future time, Hongkong people will have to come to grips with the reality that the AIDS virus can be contained by controlling any of two routes: the sexual transmission route and the intravenous drug use through the sharing of needles.

Blood transfusion as a transmission route has all but been eradicated in Hongkong, with the coming of the Elisa blood test (all donated blood is screened for the AIDS virus) and the heat-treated and AIDS-safe blood factor supply used for the unfortunate haemophiliacs.

For the moment at least, there is no cause for panic.

Nearly half (49) of the 100 carriers are haemophiliacs who received infected blood products before the discovery of heat treatment to kill the virus. If all the supplies are safe, haemophiliacs and those needing blood during surgery would in theory be free of the virus in future.

Only a third were infected through homosexual or bisexual activities. Another six have caught AIDS through heterosexual activities.

No intravenous drug users have tested positive for the virus.

Is Hongkong seeing a true picture of the AIDS problem. There is no mandatory testing required as such which experts worldwide concede is not viable.

Those attending social hygiene clinics are being routinely tested for the AIDS antibody but then those who seek help in such clinics are suffering from one form of sexually-transmitted disease or another. Healthy individuals who are promiscuous would practically not be reached by this testing program.

Outside of these Government clinics, referrals from private doctors and hospitals are also being encouraged. Since April 1985, a mere 1,192 (or two per cent of those tested) have been referred, indicating that otherwise healthy individuals are hesitant to seek medical advice on the disease.

A spokesman for the Medical and Health Department said it was believed that drug addicts in Hongkong did not share needles because they were "freely available" unlike in some countries where a doctor's prescription was needed in order to procure one.

The sexual debate is coloured by the homosexuality issue in Hongkong.

It does not help matters at all as AIDS, previously perceived to be a "homosexual plague" continues to be perceived as such. In Britain, only about four per cent of those infected were a result of heterosexual relations and the majority were homosexual or intravenous drug users.

Figures in Hongkong would support this, as only six carriers said they caught the virus from heterosexual activities, compared with 34 homosexuals or bisexuals.

/13046

## HERPES REPORTED ON RISE IN HONG KONG

54500026 Hong Kong SOUTH CHINA MORNING POST in English 9 Sep 87 p 7

[Text]

CASES of herpes genitalis, a sexually-transmitted disease, are increasing in Hongkong, the [regional physicians] conference was told.

Dr A.S.C. Chan, of the Hongkong Dermatological Society, said the disease was becoming more common because it largely remained untreated, judging by the fact that most of the reports were recurrent infections.

"The individuals would form a reservoir of source of infection, gradually increasing in numbers like a snowball," he said.

Fortunately for Hongkong, he said, the attacks were quite mild.

This may, however, be

due to the high prevalence in Hongkong of Type 1 herpes simplex (not a venereal disease) which creates some sort of an immunity.

Dr Chan said the best way to diagnose herpes was to make a culture of the virus.

The doctor said accurate diagnosis was a "must" in the management of venereal diseases.

Careful follow-up, rapid contact tracing and making sure the patient abstained from sex during infection should also be observed.

"The importance of treating sexual contacts, and thus viewing a patient suffering from a sexually-transmitted disease as only half a body, because it takes at least two to have the disease, cannot be over-emphasised," Dr Chan said.

/13046

## TWO NEW SUSPECTED CHOLERA CASES, HAWKERS RAIDED

54500027 Hong Kong SOUTH CHINA MORNING POST in English 21 Sep 87 p 4

[Article by Simon Macklin]

[Text]

THE Regional Council is to step up raids on illegal food hawkers following concern over two new suspected cholera cases.

The suspected cholera victims were said to be in a satisfactory condition in Princess Margaret Hospital last night as doctors awaited results of medical tests.

A 75-year-old man from Yuen Long, and a woman aged 54 from Tze Wan Shan, were both admitted to the hospital on Friday night but a Government spokesman said results would not be ready until this morning to confirm if they were suffering from cholera.

The two new cases come less than a week after the first confirmed case of cholera so far this year, was reported by the Medical and Health Department on September 19.

The first victim, a 16-year-old boy living in a squatter area in San Po Kong, was yesterday said to be in a satisfactory condition.

His illness was confirmed last Friday and it is believed he contracted cholera after

eating at an illegal cooked food stall.

The two suspected cholera victims are believed to have contracted the disease from different food outlets in the New Territories.

And the identification of the first cholera victim this year has led to plans for a blitz against unlicensed food hawkers.

A spokesman for the Regional Services Department said increased measures would be taken to combat unlicensed hawkers and called for the public to help the campaign by refusing to patronise unsanitary food outlets.

He said the department was determined to crack down on illegal food hawkers who posed a serious public health hazard.

The spokesman warned the public to steer clear of unhygienic unlicensed food hawkers and to pay attention to their own personal hygiene.

He said food items sold by hawkers were highly susceptible to diseases such as cholera, dysentery, typhoid and viral hepatitis.

And he said the Regional Council's campaign required full co-operation from the public.

The spokesman appealed for the public not to patronise illegal hawkers.

Arrests of illegal hawkers by Regional Council General Duties Teams in the period between April and August this year have increased by more than 11 per cent over the same period last year.

Between April and August this year a total of 5,168 unlicensed hawkers were arrested by the department's staff, 794 of those arrested were cooked food hawkers.

During the same four month period there were 554 prosecutions against unhygienic licensed food premises and 1,161 prosecutions against unlicensed food premises.

Sixteen food establishments had their licences suspended for two or three days for having repeated offences under the Public Health and Municipal Services Ordinances for three times within a 12 month period.

## HONG KONG CANCER TOLL HIGHER THAN WORLD AVERAGE

54500028 Hong Kong SOUTH CHINA MORNING POST in English 22 Sep 87 p 3

[Article by Mary Ann Benitez]

[Text]

ONE in every three deaths in Hongkong is from cancer, a figure higher than the world average. It is a "frightening reality" which local doctors deny is due to poor treatment.

Dr Wesley Shiu, a cancer expert at the Chinese University, said cancer was the top killer in Hongkong; unlike the Western world where heart disease was the biggest killer.

However, he denied that the high mortality rate was due to ineffective treatment.

"I think the treatment in Hongkong is as good as any other country, if not better," he said, while speculating that the problem might be due to an "ageing population".

"There's no doubt that you get more cancer as you grow older. That may account for some of the rising cancer in Hongkong," Dr Shiu said when introducing a symposium of the European Organisation for Research and Treatment of Cancer (EORTC).

Earlier in the day, the Chief Secretary, Mr David Ford, said the disease had been the leading cause of death since 1964 in Hongkong, accounting for 8,054 or 31 per cent of all deaths last year.

Opening the symposium at Hotel Riverside Plaza, Mr Ford said the battle against

cancer had been the "primary concern" of Hongkong's medical authorities.

Cancer deaths in the territory have been steadily increasing in the past decade, with lung, liver and nasopharyngeal cancers the most prevalent form among men; and lung, breast and cervical cancers mostly affecting women.

Mr Ford said the Government planned to double the number of oncology and radiotherapy beds over the next eight years.

"At the same time, we shall bring in additional treatment facilities to cope with the problem," he said.

A member of the newly-formed EORTC Hongkong Foundation Committee voiced the public's concern at the high ratio of deaths from cancer.

"The figures are very frightening," said Mrs Sally

Lo. "With more knowledge I believe that the remission period should be much longer."

Another member, Mr David Tang, said research being done by EORTC should be made available to Hongkong because of these "frightening statistics".

"We in Hongkong must plug into this research and become totally up-to-date," he said, while encouraging public support for a fellowship fund for the EORTC Hongkong Foundation.



The foundation is being set up so young doctors can be trained in cancer treatment techniques in Europe and research knowledge shared here.

Dr Shiu said early detection could also help stem the tide as this was important for effective treatment. This had been proven by a 50 per cent survival rate among women diagnosed as having cervical cancer at an early stage.

He said the Chinese University's Department of Clinical Oncology, where he is senior lecturer, was developing a "tumour marker system" to help detect cancers of the liver and nasopharynx. Markers for lung and other cancers would next be developed.

In the system, a patient's blood is mixed with reagents which are able to detect the presence of a tumour.

EORTC is an organisation linking 12 European countries on cancer treatment research and works closely with the United States medical profession.

Its chairman, Mr R.H. Grierson, said: "Given the means, our doctors know that they can improve remission rates and, in rare cases, cure from the current 50 per cent to around 65 per cent."

/13046

## BIO-ENVIRONMENTAL MALARIA CONTROL YIELDS RESULTS

54500024 Madras THE HINDU in English 14 Sep 87 p 4

[Text]

MADRAS, Sept. 13.

A bio-environmental control of malaria, based on systems approach, has given significant results in an experiment conducted in the public sector BHEL township at Ranipur, near Hardwar in Uttar Pradesh.

The study was launched by the Malaria Research Centre, (MRC), of the ICMR in July 1986 in the township following reports of a rise in the incidence of malaria resulting in high morbidity.

Situated near a pilgrim centre, the Ranipur township, with a 25 sq.km spread and a population of 45,000, attracted large crowds and had seven planned residential colonies besides seven unauthorised labour colonies. The number of malaria patients in the township kept rising from 1,129 in 1983 to 3,049 in 1985. Patients with falciparum malaria also increased leading to serious sickness and complications.

The MRC undertook a survey of the BHEL complex to identify the mosquito breeding sites and work out a strategy to put down malaria. It revealed a number of burrow pits, low-lying areas with acute water stagnation, faulty installation of water pipes in these low-lying areas without drainage leading to formation of ponds, open drainage with blocked drains and diverse vector breeding points.

According to an ICMR report, all possible breeding sites were first mapped and the intervention started in September 1986. By January 1987, the entire campus was brought under control.

**Elimination of breeding sites:** Elimination of mosquito breeding sites was given top priority. BHEL produces about 100 cubic metres of thermal power station fly ash every day and this has to be removed from tanks at an estimated cost of Rs. 10 lakhs per year. Elimination of the breeding sites was achieved by filling them up with the fly ash and the areas were levelled up using tractors and bulldozers.

Simultaneously, all water taps located inside the campus in lowlying areas were removed and reinstalled at an appropriate level with proper drainage. A continuous health education programme was also taken up.

Monitoring of the bio-environmental control system was taken up only in January 1987 and started showing 'good results'. There was drastic reduction in man hour density and total naopheline densities.

Blood smears from patients with fever were collected and brought to the MRC laboratory, stained and examined. Results of active and passive surveillance revealed a drastic reduction in malaria.

/9274

## FACTORY ACT IDENTIFIES MORE REPORTABLE DISEASES

54500023 Calcutta THE TELEGRAPH in English 14 Sep 87 p 5

[Article by K. K. Sharma]

[Text]

New Delhi, Sept. 13: The government has identified 29 diseases as those related to work in various industries. These include seven diseases which have been added to the Factories Act by a recent amendment but they have yet to come into force.

The list contains a variety of ailments that affect the health of workers. There are, for instance, silicosis, anthrax, poisoning by nitrous fumes, toxic anaemia, primary epitheliomatous cancer of the skin, poisoning by mercury, manganese, arsenic, lead or lead tetra-ethyl, pathological manifestations due to radium or other radioactive substances and X-rays, occupational or contact dermatitis caused by direct contact with chemicals and paints, noise-induced hearing loss and toxic jaundice.

Diseases like beryllium poisoning, coalminers' pneumoconiosis, phosgene poisoning, occupational cancer, isocyanates poisoning, toxic nephritis and carbon monoxide have yet to be enforced though notified.

Under the Factories Act, the manager of a factory is required

to inform the authorities of any disease notified by the government in a prescribed form. A factory's medical practitioner is expected to immediately report to the chief inspector of factories all details of any notified disease diagnosed in any employee. Failure to do so will cost the doctor up to Rs 1,000 in fine.

Diseases afflicting miners generally are silicosis, phemoco-nis, asbestosis and cancer of lung or stomach or the pleura and peritoneum. Dock workers are known to be prone to lead tetraethyl poisoning, manganese poisoning, carbon bisulphide poisoning, benzene poisoning, anthrax, pneumoconiosis, poisoning by halogens or halogen derivatives of the hydrocarbon and primary epitheliomatous cancer of the skin.

The Workmen's Compensation Act, 1923, provides that an occupational disease contracted by a worker should be treated as an injury by accident and hence liable to compensation to the affected worker.

The Bhopal disaster forced the government to look more closely at the safety provisions in the

relevant Acts and it was then noted that the requirement under safety provisions fell short of meeting hazards created by the new processes and technology being introduced specially in the chemical industries. This resulted in a further amendment of the Factories Act.

The amendments placed the responsibility squarely on the employer for many acts—like ensuring the health of workers at work, that articles or designs were not risky to the workers, maintaining health records and medical history of workers, compulsory disclosure regarding dangers, including health hazards, and allowing workers to participate in promoting proper safety and health at the work place.

The Union government has also armed itself with powers to set up inquiry committees to go into the standards of health and safety observed by a factory.

These latest amendments will come into force once the model rules have been prepared by the directorate-general of safety.

## INCIDENCE OF LEPROSY IN CALCUTTA REPORTED RISING

54500022 Calcutta THE STATESMAN in English 10 Sep 87 p 3

[Text]

NEARLY 85% of the population in Calcutta have come in contact with leprosy bacilli, according to a recent survey conducted by the School of Tropical Medicine. Sources in the STM said the figure indicated that the incidence of leprosy had risen in the city during the past few years.

However, few among those, who have come in contact with the bacteria, were likely to develop the disease. Most of them, the sources added, had developed a stronger resistance power by coming in contact with the bacilli.

It is felt that the influx of leprosy patients from neighbouring States has increased their number in the city. Lured by the cure and treatment provided by voluntary and missionary organizations, patients troop into the city every year from Orissa and Bihar.

Usually, these patients arrive only after the ailment has worsened considerably. Rarely are they cured completely because of delayed treatment. They stay back in Calcutta as the rigours of social isolation are less in a metropolis compared to their native villages.

The social stigma attached to leprosy has discouraged doctors from specializing in its treatment. Nearly 40% of the posts in the

West Bengal Government's leprosy control units are vacant as doctors cannot be motivated to take up a job that requires a lot of sacrifice but provides little money. The situation has come to such a head that the superannuated professor of the leprology department of the Tropical School has been asked to continue till further orders. The two posts in the Assistant Professor grade are vacant in the same department.

## POSTS VACANT

For the same reason, laboratory technicians cannot be found to provide the doctors with diagnostic assistance. A large number of these posts are vacant and the few, who occupy these posts, are not adequately trained in conducting the necessary "skin-smear" tests.

The Government recently instituted a committee to probe wastage of leprosy medicines which are usually not lifted from the Central Drug Stores by districts, especially those in North Bengal. It has been alleged that doctors in the districts usually do not requisition these drugs to avoid complications of administering the multi-drug regimen that requires constant monitoring.

/9274

## CHOLERA CASES IN MADRAS AT SEASONAL LEVEL

54500021 Madras THE HINDU in English 9 Sep 87 p 1

## [Text]

MADRAS, Sept. 8.

Cholera is on its seasonal upswing in the city. Six persons have died of the disease during the past one month, and daily between 50 and 60 persons are being admitted at the Infectious Diseases Hospital in Tondiarpet with acute gastro-enteritis or cholera. Most of the patients are said to be from Tondiarpet and Vyasarpadi.

In the lean season, the number of patients with this endemic disease in the city may not add up to more than 40 a month. But though the current incidence is markedly high in comparison, authorities say it is a level that is only usual for this part of the year. Daily patient admissions have been on this scale right through August, they say.

Corporation health staff have been distributing chlorine tablets to residents of vulnerable areas to check the incidence. Chlorine tablets, when dropped into buckets of water, destroy the cholera-causing bacteria.

Surveys show that areas served by water tankers report more cases. Specific reasons for this are not yet known. But poor hygiene levels and the prevailing water shortage are being generally blamed for the disease's hold over the city.

At Radhakrishnan Nagar in Tondiarpet, however, authorities believe that the residents have unwittingly helped spread the disease amongst themselves. Finding that the large water pipe from the Minjur well-fields to the Robinson Park water works was passing underground, some persons decided to end the water shortage in the locality. They excavated the pipe, punched a hole through it and set up their own water distribution point three weeks ago.

In course of time, the water became contaminated and the colony was soon sending out a regular stream of cholera patients to the hospital. Despite being apprised of the health hazard, the residents are stiffly opposing the sealing of the unauthorised hole in the water main, officials say.

/9274

## ANTI-MALARIA REMEDY PERFECTED

Haifa INNOVATION in English No 143, Oct 87 pp 3, 4

[Text]

Jerusalem — The extract of an herb long used in traditional Chinese medicine for the treatment of malaria — *Artemisia annua* — may become available for the treatment of that widespread disease, thanks to the efforts of Israel researchers. Work already completed suggests that the time for the project's commercialization may have arrived.

The active principle in *Artemisia annua* was long ago isolated by scientists in China, who did not publish the results their work. A European pharmaceuticals firm reportedly managed to synthesize the same substance, but that also failed to lead to a breakthrough — presumably because of economic reasons.

However, there is a definite need for the disease fighting potential of artemisin, since it has been shown to be especially effective against those strains of the malarial parasite which are resistant to other medications. Few, if any other effective drugs are now available for that purpose.

Work recently carried out here by S. Sarel, of the Hebrew University, together with R. Dayan, of the Ministry of Agriculture, suggests that a solution may be within reach. They have demonstrated that *Artemisia annua* can be cultivated successfully in Israel, and that its active ingredients can be extracted. In fact, the yield of artemisin and related active compounds was encouragingly high, and subsequent laboratory tests with a chloroquine resistant strain of the malarial parasite indicated a higher than expected level of activity.

Yisum, the Hebrew University subsidiary charged with the industrial and commercial development of research projects, is looking for qualified partners for the next stages of this effort.

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## MINISTER OF HEALTH'S STATEMENT ON HTLV-1 VIRUS

54400008a Kingston THE DAILY GLEANER in English 22 Aug 87 p 19

[Text]

DR. KENNETH L. Baugh, Minister of Health, has issued a statement on the HTLV-1 virus, a news item concerning which appeared recently in the **Star** newspaper on Tuesday, August 18.

Denying that the virus is similar "in action and behaviour" to AIDS (Acquired Immune Deficiency Syndrome), Dr. Baugh said a great deal of work has been done in Jamaica on the virus and more is being done.

Text of the statement follows:

"Information concerning the HTLV-1 Virus is not new to Jamaica. Extensive articles were published in the **Daily Gleaner** in 1985. Research on the Virus began at the University Hospital of the West Indies in August 1983, in conjunction with the National Institute of Health and publications have been made in a number of medical and scientific journals.

"We consider the work done in Jamaica on this virus to be highly creditable and of great value in the field of Science, especially in contributing to the understanding of the nature of this Virus.

"The results are still very preliminary. The nature of the virus, mode of spread, associated diseases, are some of the features under study and cannot be considered to be conclusive.

"The name and classification of the Virus is causing some confusion. The unfortunate implication of the article is that it is similar in action and behaviour to the Acquired Immune Deficiency Syndrome (AIDS). This not true.

**Same group**

"HTLV-1 and the AIDS Virus, belong to a group of viruses called *retroviruses*, recently discovered, which have structural similarities but act differently and some members of the group are not even known to cause disease. As with other organisms, many of similar structure have widely differing actions, while some cause disease, others have no significance and some are actually beneficial to man.

"For this reason, and because a number of other Viruses have been implicated with the AIDS disease, the name of the AIDS Virus has been changed and is now called Human Immunodeficiency Virus (HIV).

"The action of the AIDS Virus is predictable, attracts 'T' cells and destroys them, thus destroying a vital agent in the Immune Systems Complex which fights bacteria, viruses and prevent disease.

"HTLV Virus attacks the cell, does not destroy it, but rather stimulates it to divide causing proliferation of the cells, resulting in an aggressive type of Cancer (that Adult T Cell-Leukemia) commonly called ATL.

"ATL occurs in many countries, notably Japan, many Tropical Islands, the United Kingdom and the United States of America, etc.

"All over the world there are many diseases where the causes are not known. They include multiple sclerosis, other neurological disorders, collagen diseases, crippling arthritis of many sorts, many more common in temperate countries than in tropical countries. They vary because of genetic, nutritional, familial, dietary, climate and other factors.

"In Jamaica, spastic paralysis, though quite uncommon, has been known clinically for many decades and is described in many publications. We have always called it 'Jamaican neuropathy'.

"To date, the cause has not been determined. At one time, it was felt to be caused by syphilis or other sexually-transmitted diseases — now disproved. Subsequently, the cause was thought to be nutritional disorders — now disproved. The same disease is present in many other countries, notably tropical islands and Japan and is called Tropical Spastic Paralysis.

### **More research**

"Naturally, when new Viruses are identified they are investigated to determine their association, if any, with a number of these diseases of unknown aetiology. In the case of HTLV-1, significant incidence of high levels of antibodies to this virus has been found in the bloods of those patients with Spastic Paralysis.

"This naturally merits further research which is being actively pursued, but again, at this time, the results are not conclusive. Apart from the fact that the problem (Spastic Paralysis) has its highest incidence in the age group 20-46 years, there is no evidence of any association with sexually transmitted diseases at this time.

"As regards the presence of antibodies in the blood of 5% of the population, the implication of the

article is that the 100,000 people infected will later get ill, and/or infect others.

"The presence of antibodies against any virus means only that the person has been exposed their bodies have produced these antibodies to fight off the disease. Vaccination/immunisation is used to stimulate the production of antibodies to specific disease which in turn protect the individual.

"Any survey done on our population will show antibodies to dengue, leptospirosis or other regular diseases with which we all come in contact.

"As to whether people with antibodies to HTLV-1 will over develop the disease or pass it on is speculation at this time. A previous article estimated that of those so-called infected cases which show antibodies, less than 1% are at risk of developing ATL.

"In this respect, AIDS behaves quite differently, as it is well known that many with positive test go to develop AIDS.

"Once again I appeal to the people of Jamaica not to panic when sensationalism invades the arena of research and publishes facts in a way which could create misunderstanding and fear.

"At the same time, we remain committed to provide information as widely as possible to encourage extensive health education on these diseases of immense social importance."



## GOVERNMENT ANNOUNCES HEALTH SERVICE REVAMPING PLAN

54400008b Kingston THE DAILY GLEANER in English 9 Sep 87 p 1

[Text]

A COMPREHENSIVE programme to upgrade, restructure and modernize the island's health service is to be undertaken over the next five to seven years at a cost of J\$739 million. Prime Minister Edward Seaga announced yesterday.

Of this amount, \$65 million has already been spent to improve the island's primary health care system and the remaining \$674 million will be spent over the next five years.

Mr. Seaga was speaking at a ground-breaking ceremony for a new five-storey Central Public Health Laboratory on Slibe Pen Road. The new lab will replace the old one which is presently located on North Street, and will be built at a cost of some \$17.1 million with assistance from the European Economic Community. It is expected to be completed within 18 months.

Mr. Seaga said that \$68 million was being spent to repair and renovate all of the island's 370 health centres as part of the primary

health care improvement programme. Work on these centres has been in progress over the past four years with assistance from the United States Agency for International Development and the entire project is expected to be completed this year.

In addition to the primary health care improvement programme, there will also be the upgrading of hospitals with emphasis being placed on those which are "strategically located". This project, on which design work has already started, will be carried out over the next five years at a cost of some \$400 million and is being financed by the Inter-American Development Bank and the Italian Government.

The project will involve the construction of a new Bustamante Children's Hospital and the upgrading of the Kingston Public, Spanish Town, May Pen and Cornwall Regional Hospitals. According to Mr. Seaga, the project is to be approved shortly by the IDB.

/13046

## BRIEFS

HEALTH MINISTER ON AIDS CONTROL CAMPAIGN--Mozambican Health Minister Dr Fernando Vaz has disclosed that according to the latest information the rate of AIDS cases in Mozambique is in the region of 0.4 percent. Although this rate is relatively low, Fernando Vaz said that it would be difficult to control the disease within 10 years, unless appropriate measures are taken to prevent the spread of AIDS. Minister Vaz was speaking at the opening session of the 14th National Health Coordinating Council in Maputo today. He said that in 1988 priority will be given to the campaign to control AIDS, as well as other activities within the framework of the emergency program. The meeting ends on Friday. [Text] [54000003a Maputo Domestic Service in Portuguese 1730 GMT 13 Oct 87] /9274

## BRIEFS

MEASLES NO 1 KILLER--Measles was the country's number one killer of children in 1986. Figures released by the Health Department yesterday shows that an estimated 6000 were sick with the disease last year. About 600 of them died. And the tragedy is that the disease is easily preventable. Port Moresby General Hospital recorded 295 children with severe measles of whom 34 died. Nonga Base Hospital admitted 263 of whom 26 died. Whooping cough is the next biggest killer of children with an average annual toll of 300. Tetanus kills about 100 babies, tuberculosis 200, and polio maims 1000 children each year. [By Frank Senge] [Excerpt] [Port Moresby PAPUA NEW GUINEA POST-COURIER 9 Sep 87 p 1] /13046

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## AIDS USED AS EXCUSE TO DEPORT UNDESIRABLE STUDENT

54500031 Hong Kong SOUTH CHINA MORNING POST in English 8 Sep 87 pp 1-2

[Article by John Steinhardt]

[Text]

AN African student from the Congo who had had an affair with the daughter of a high-ranking Guangdong Party official was recently sent home on the pretext that he was suffering from AIDS, according to fellow-students in Guangzhou.

Mr Arsene Kebede, 22, a first-year student at the College of Agriculture in Guangzhou, was thoroughly tested for the deadly Acquired Immune Deficiency Syndrome in June on his return to Brazzaville by a French doctor working for the Government, and also by Chinese doctors resident in the Congo.

When all the tests proved negative, the Congolese embassy in Beijing informed all the Congolese residents in Guangzhou that the AIDS scare apparently had been a smoke-screen to hide Mr Kebede's love tryst with the party official's daughter.

The embassy requested that Mr Kebede be reinstated as a student in China and his Chinese government grant restored. The Chinese authorities refused.

Ultimately, the Congolese Government averted a growing scandal by transferring Mr Kebede to Cuba, where he is now resuming his studies, according to his roommate in Guangzhou.

Mr Kebede had been in perfect health on his departure, said Mr Dossa Kokou from Togo, a fourth-year student of agricultural mechanics.

He had been under the impression that Mr Kebede was leaving with two other Congolese students of agriculture "for re-orientation" in Brazzaville, on the instructions of a letter received direct from the Congolese Foreign Ministry.

But he had had his passport confiscated by the Chinese authorities on departure.

Congolese students remaining in China later discovered that the letter had been preceded by a visit from the Chinese Ministry of Foreign Affairs to the Congolese embassy in Beijing, to inform the ambassador that Mr Kebede had AIDS.

Students at the Agricultural College were subsequently told by teaching staff that Mr Kebede's departure was due to his having contracted AIDS.

They were advised to be vigilant regarding the spread of the disease and in particular to avoid their African colleagues, whom they openly accused of carrying the disease.

They became suspicious, however, when a Chinese female student at the college commonly known to have been Mr Kebede's girlfriend continued to attend lectures and was not given any medical tests.

Furthermore, it was well known that Mr Kebede's relations with another girl, the official's daughter, had caused consternation and embarrassment in party circles.

The girl, who works in The China Hotel, was known to students as "la blonde", apparently more due to the associations of her shapely figure than the colour of her hair. Her parents have reportedly recently made plans for her to emigrate to Australia.

The scandal comes amid increasing public concern over the possible spread of AIDS into China.

Southern coastal cities, and Guangzhou in particular, have gained a reputation in recent years for prostitution, and for more liberal attitudes towards sexual relationships in general.

Over the past two months, police have been posted at the entrances to all foreign students' quarters in Guangzhou and at the main entrances of all colleges and universities housing foreign students.

All Chinese entering the buildings must produce an identification card and explain the purpose of their visit.

Chinese women who enter hotels with foreign students are regularly interrogated by the police and accused of being prostitutes.

Chinese women who have been seen with foreign male friends in the streets are now likewise routinely questioned if they are not escorted to their homes.

ANTI-AIDS DRUG BEING REFINED IN COUNTRY WITH ISRAELI COOPERATION

Derived from Egg Yolks

54000002 Johannesburg THE STAR in English 11 Sep 87 p 1

[Article by Toni Younghusband]

[Text]

An Aids drug, which halts the progression of the disease and relieves the symptoms, is being produced in South Africa in collaboration with Israeli experts, delegates at an international Congress on Aids heard in Johannesburg yesterday.

It is, however, not a cure for the disease.

The medicine, which is derived from hen egg yolks, is administered orally. It resembles butter or margarine and is spread on bread and eaten for breakfast. An Aids patient must take 15 g of the medicine daily.

Professor Barry Schoub, the director of the National Institute for Virology, said the medicine had been given to 13 Aids patients in South Africa so far. Three of them were Malawian miners.

The medicine has no side effects, is easily obtainable and has shown excellent results. He said the medicine extracted cholesterol from the body's cells — without cholesterol the Aids virus had difficulty in duplicating and remained in a latent form. The patient must however continue with treatment otherwise the virus may flare up again.

Dr Yehudi Skornick, the deputy head of the department of surgery at Tel Aviv Medical Centre in Israel, said the medicine was first discovered in Israel during cancer research.

It is not yet known how long treatment must be administered as tests are still in the early stages. Professor Schoub said it was also not yet possible to determine whether Aids patients receiving the treatment were still infectious.

## Results Shown on Local Patients

Johannesburg BUSINESS DAY in English 11 Sep 87 p 3

[Article by Dianna Games]

[Text]

A MATERIAL to inhibit the AIDS virus and arrest its spread into the body's immunity system, formulated by Israel and currently being refined in SA, is being used with some success on local AIDS patients.

This was announced in Johannesburg yesterday by Prof Barry Schoub, director of the National Institute of Virology, and Dr Y Skornick of the Tel Aviv Medical Centre's department of surgery.

Skornick said clinical trials had been started about 16 months ago and to date 41 patients from abroad had been tested. Some of the patients had been brought back from an advanced stage of the disease to lead normal lives.

The material, called AL721 and derived from egg yolks, is being used on 13 sufferers in SA, including three Malawian mineworkers.

The product, patented in the US when used in cancer treatment and before its therapeutic properties regarding AIDS were known, is being produced under strict quality control in SA, making it a superior product to what is now being produced overseas, Skornick said.

Schoub said it was not an AIDS cure, and it was not yet known how long it would work for a patient or whether its use — it is ingested with fat-free food — would lessen the infectivity of AIDS sufferers.

At yesterday's conference on AIDS at Johannesburg Hospital, Prof Jack Metz, head of the SA Institute for Medical Research, said so far this year 17 new cases of AIDS had been diagnosed in SA, bringing the number of cases found in SA since 1982 to 60.

He said over 250 000 blacks had been tested in SA and 81 had been found to be positive.

Metz, while warning of the extrapolation of sample results, said the 81 positives suggested there might be about 3 000 infected people in the same age group — 15 to 50 — in the total black population.

Dr Brian Brink, Chamber of Mines AIDS co-ordinator, said the chamber had conducted tests on about 25 000 mineworkers for the AIDS virus. Final results of the number, which includes many of those previously tested as part of the chamber's general testing programme, were not yet known.

## New Drug 'No Cure for AIDS'

Johannesburg THE STAR in English 24 Sep 87 p 10

[Text]

False hopes that the newly-developed material — AL721 — is a cure for Aids should be dispelled, because it provides nothing more than mild clinical relief, according to a leading member of the Gay Association of South Africa.

It was revealed last week South African researchers are co-operating with Israeli scientists on research into the effectiveness of the new substance — derived

from egg yolks and taken orally on a slice of bread like margarine or butter.

Dr Yehudi Kornick, deputy head of the Department of Surgery of the Tel Aviv Medical Centre, said clinical tests with the substance had been "very encouraging".

"It would be wrong to overstress the benefits of AL721 ... there is not enough evidence to indicate it does more than make an Aids sufferer feel a bit better," a Gasa member said.

## AIDS INFORMATION, TRAINING CENTER LAUNCHED

Cape Town THE ARGUS in English 2 Sep 87 p 12

[Text]

JOHANNESBURG. — An Aids information and training centre, aimed at educating teachers, the medical profession and the clergy, has been launched at the South African Institute of Medical Research (SAIMR).

The centre, under the leadership of Dr Ruben Sher, head of the Aids Advisory Group, will be staffed by a medical officer, nursing sisters, educationalists and psychologists and will offer intensive, short courses and workshops enabling those attending to educate others.

A grant of R300 000 has been made to the centre by the Chamber of Mines.

SAIMR director Professor Jack Metz said: "The medical authorities in South Africa are concerned about the potentially serious Aids problem facing the country and there is an urgent need to contain the spread of the virus. We must not be complacent that the potential

isn't there for an epidemic."

Professor Metz said face-to-face education was the best means of communication and had the added advantage of avoiding unnecessary arousal of fear.

"In the absence of a preventive vaccine or cure, the main strategy to contain the spread of the infection is education.

"As the mode of spread is predominantly sexual, sexually-active individuals exposed to possible infection must know how to protect themselves against acquiring the virus, but to do so they require certain basic information," said Professor Metz.

Education was best undertaken through existing channels of communication within the community such as health-care workers, teachers, the clergy and youth groups.

"However, before these potential educators can undertake this vital task there is an urgent need to train the trainers so that an amplification effect can be achieved," said Professor Metz.

Courses and workshops will be tailored according to the needs of individual groups and will be held at the SAIMR's School for Advanced Laboratory Medicine in Hillbrow.

Professor Metz said he hoped to see the establishment of similar centres in other parts of the country.

/8309

CSO: 54000004



## 82 AIDS CASES REPORTED; NATAL CASES VIEWED

54000005 Johannesburg SAPA in English 2213 GMT 14 Oct 87

[Text] Durban Oct 14 SAPA—There have been 82 AIDS cases in South Africa—six in Natal—and tests by the Natal Blood Transfusion Services (NBTS) have revealed that 57 people in the province were carriers of the disease, Prof Dennis Pudifin, professor of medicine at the University of Natal, said today.

Prof Pudifin, a representative on the AIDS Advisory Group, was speaking at the joint congress of the Infectious Diseases Society of Southern Africa and the Sexually Transmitted Diseases Society of Southern Africa, in Durban today.

The six Natalians were five white men and a coloured man. Four of them had died, one committing suicide while others died of secondary illnesses.

Of the 82 AIDS cases in the country, 62 were South Africans and the other 20 had been referred to SA hospitals from neighboring states, or were migrant workers and travellers.

Forty-two of the 62 South African sufferers had died, Prof Pudifin said. Most of them were homosexual or bisexuals, while five had contracted the disease through blood transfusions.

The NBTS tests over a two-year period on 157,000 people showed that 57 Natalians were AIDS carriers. They came from a wide social spectrum and were from almost all race groups.

It was noted by delegates that there was a significant absence of the disease in the Indian community but the only theory put forward to explain this involved the strict Indian religions.

Prof Pudifin said that 70 of the about 1500 hemophiliacs in the country were infected by the disease.

## EXPERTS; REPATRIATION WILL NOT STEM AIDS

54000007a Johannesburg THE STAR in English 23 Sep 87 p 11

[Article by Toni Younghusband]

[Text]

More than 1 000 foreign Aids carriers face repatriation in terms of legislation to be published in the Government Gazette on Friday — yet medical experts believe this will not halt the spread of the disease.

Rumours of possible repatriation were first voiced by the Chamber of Mines president, Mr Naas Steenkamp, earlier this month. He said the Chamber had held wide-ranging talks with the Government on the possible resettlement, within their own communities, of people who might prove a hazard to the people they live with.

This week the Department of Home Affairs confirmed that legislation to this effect would be published in the Government Gazette on Friday.

Dr Dennis Sifris, head of the Aids unit at the South African Institute for Medical Research, said Aids did not pose a threat to the general population and education, not repatriation, was the answer.

Dr Marius Barnard, PFP spokesman on Health, said if the Government repatriated migrant workers it should compensate them for their loss of income.

The National Union of Mineworkers' assistant general secretary, Mr Marcel Golding, said the solution did not lie in repatriation but in providing proper counselling and medical facilities. "Migrant workers are being used as scapegoats," he said.

But Health Minister Willie van Niekerk said any foreign individual found to have Aids would be approached discreetly and asked to leave South Africa.

/9274

## LAB TESTS SHOW AIDS VIRUS 'DEACTIVATED'

34000007b Johannesburg THE CITIZEN in English 23 Sep 87 p 9

[Text]

LABORATORY tests conducted in South Africa showed that a cholesterol extracting substance deactivated the Aids virus. The Aids virus is surrounded by an "envelope" that consisted mostly of cholesterol.

This was said yesterday by Professor Barry Schoub, director of the National Institute of Virology at a public lecture in Johannesburg.

However, tests are still being conducted on the substance. There is no miracle cure for Aids yet.

Prof Schoub said that although "remarkable progress" had been made since Aids research started about five years ago, medical experts were still not very close to discovering a miracle cure or vaccine for the disease.

The virus, he said, had caught the medical profession by surprise. By the end of the last decade, it was believed that all viral infectious diseases had been eliminated. The world's first three Aids cases were detected in Europe in 1983. To date an estimated 60 000 people suffered from Aids, and there were about 7,5 million carriers of the virus.

Aids had to be seen in perspective however, Prof Schoub said. Of the 68 reported cases of Aids in this country, 42 people had died. The number of people who succumbed to cardiac disease and cancer was much higher than this though.

Tuberculosis killed about 15 people a day in South Africa, and in the US thousands of people died every month of cardiac disease.

Aids was primarily a venereal disease, but was not easily transmitted. It was important to understand, Prof Schoub said, that the Aids virus itself was not responsible for

the death of a victim. Infection manifested itself in a number of "opportunistic diseases", which were what the Aids sufferer usually succumbed to.

These included pneumonia, diseases of the nervous system which could result in blindness or brain shrinkage, wasting, black patches or tumors on the skin and lymph gland infection.

Professor Schoub said it would be "wholly unfeasible" to create "colonies" of Aids victims in order to isolate them from other people. He said the idea was logistically and practically impossible and was also unethical.

## RABIES CRISIS IN NATAL SEEN AS 'WORST IN HISTORY'

54000008 Cape Town THE ARGUS in English 23 Sep 87 p 3

[Text]

DURBAN. — The rabies crisis in Natal, where figures for the killer disease are already double those of last year, is the "worst in recorded history".

The situation is so critical that the country's second rabies diagnostic unit, the other is at Onderstepoort veterinary research institute in Pretoria, will start operations in Maritzburg on October 1.

The issue of rabies control is being reviewed by veterinary authorities.

Dr Gareth Bath, veterinarian in charge of the regional laboratory at Allerton in Maritzburg, said today: "We are not winning the way we are doing it now."

"The crux of the matter is responsibility. People have to realise a dog isn't just something that hangs around the house; it must be cared for and controlled."

He said one option being explored was giving local authorities stricter control over animal ownership and tougher penalties for offenders.

Rabies is now officially the province's major animal disease problem and strays, many of them from Kwazulu, are a major cause of the spread.

Natal has 95 percent of the country's rabies cases and 90 percent of these are concentrated in the coastal region from the Transkei border to Eshowe, including Durban.

However, the main danger area remains the Amanzimtoti and Port Shepstone areas bordering Kwazulu, where a large number of human and animal contacts have needed treatment.

Dr Robin Thorogood, the State veterinarian for the region, said today that 137 cases had been confirmed this year and a further six were being investigated.

Of the confirmed cases, 105 were in Natal and 32 in Kwazulu.

Last year there were 72 confirmed cases and 60 the year before.

He said it was imperative that the public be jolted into an awareness of the dangers.

A breakdown of cases showed nearly half were strays and many were still wandering in from Kwazulu.

A barrier of inoculated domestic animals had to be built up to hold back the spread.

Dr Thorogood said his department would be stepping up its inoculation campaigns but it was up to people to understand the danger point the rabies epidemic had reached.

## PUBLIC HEALTH MEASURES FOR AIDS

Yerevan KOMMUNIST in Russian 17 Jul 87 p 4

[Interview with Albert Mayrapetyan, head of the sanitary-epidemiological administration of the Armenian Republic Ministry of Health, by Dz. Balagezyan, Armenpress correspondent: "Careful, AIDS!"]

[Text] At the beginning of this year, specialists of [Armenian] republic diagnostic centers have begun to examine patients for AIDS. Tests may be conducted anonymously according to the patient's wishes. For a consultation, one only has to call 35-05-15. Already more than 700 individuals have visited the center.

"The goal of these examinations is to detect carriers of the disease, if they exist, to try to help them and to adopt all measures for rapid localization of the disease in order to prevent its further spread," said the head of the sanitary-epidemiological administration of the Armenian Republic Ministry of Health, Candidate of Medical Sciences, Albert Mayrapetyan.

At present, the situation in Armenia with respect to AIDS is good--there are still no registered cases of the disease or virus carriers. However, this circumstance should not be the basis for complacency. Developing foreign tourism does not rule out the fact that "the plague of the twentieth century," as AIDS has been nicknamed, could be brought here. The public health organs must be prepared for this well in advance.

Presently there are 40,000, according to some data, and 50,000, according to other data, registered AIDS patients worldwide, half of whom have already died.

According to a WHO prognosis, by 1991 the number of AIDS cases worldwide will reach from half a million to three million. According to American data, there will be 270,000 cases by this time in the United States, with a very high mortality.

Today it has been accurately established that the disease is caused by a virus which affects the body's defense system--its immune system--thereby disarming it and making it vulnerable to all sorts of infections. This characteristic of the AIDS virus is incorporated in the name of the disease--acquired immune deficiency syndrome. The AIDS virus takes up residence in the lymphocytes,

the very cells which protect the body from various microbes and destroy defective new growths capable of degenerating into malignancies. In essence it destroys the body's entire natural defense system. Then any microbe which, thanks to the natural defense mechanism, waits "underground" for the time when the body loses its capacity to withstand it, becomes dangerous for man.

Observed 5-6 years ago in California and New York, AIDS has rapidly spread to other continents and has appeared in European countries, including ours.

According to preliminary data, several dozen cases have been registered. The overwhelming majority of disease carriers are foreign citizens residing in our country.

"What are the first clinical signs of the disease?"

"Observations show that the disease progresses very slowly. There is a prolonged enlargement of the lymph nodes, increase in temperature, fever, an abrupt weight loss, sweating and generalized weakness.

However, the disease frequently develops so slowly, it is as if it were absent. Such individuals present the greatest danger, since, not having any apparent cause for alarm, they do not see a doctor, considering themselves to be completely healthy, and may become an active source of infection. This is the reason for one of the basic tasks of public health organs--in addition to treatment, detecting virus carriers.

The new disease, having acquired such a menacing, epidemic nature, has presented virologists, immunologists and epidemiologists with important scientific and practical problems associated with developing domestic test systems for diagnosing AIDS and screening people in high-risk groups. Indisputable achievements have already been made in this area, and on the basis of scientific recommendations, specialized laboratories have been established in many cities, whose collectives are beginning to screen the population."

"Are there any effective means of combatting this disease today?"

"Not yet. Experts agree that a cure for the disease may be found in the next five years. The search for a vaccine against AIDS will be more complex, since the virus is continually changing, adapting to new conditions, so to speak. For now, doctors can prolong the life of AIDS patients. In order to protect the health of the people, it is necessary to engage in widespread medical propaganda among the population. It must be known that, according to WHO data, AIDS is mainly transmitted among homosexuals, drug addicts, alcoholics and those individuals who are not fastidious about casual intimate relationships.

In conclusion, I would like to say that AIDS is a social problem and will not be conquered by medical methods alone. The general public should be included in the fight against this insidious and very dangerous disease. It is necessary to remember that only prevention, including effective propaganda for a healthy lifestyle, can stop the danger which has already become disastrous for a number of countries."

UDC 616-092:612.017.1-064]-022:  
578.828]-036.2-078.73(470.311-25)

# INITIAL SEROLOGICAL SCREENING OF LAV/HTLV-III/HIV INFECTION IN MOSCOW

Moscow ZHURNAL MIKROBIOLOGII, EPIDEMIOLOGII I IMMUNOBIOLOGII in Russian No 7,  
Jul 87 (manuscript received 11 Jan 87) pp 21-23

[Article by V. V. Pokrovskiy, Z. K. Yankina, L. M. Toporovskiy, V. G. Ryvkina  
and V. I. Pokrovskiy, Central Scientific Research Institute of Epidemiology,  
USSR Ministry of Health, Moscow]

[Text] Infection by the virus causing the acquired immune deficiency syndrome (AIDS) appears extensively among homosexuals and drug addicts in the United States and Western Europe [2, 3]. There are seroepidemiological data regarding the circulation of the virus in countries of Central Africa, where prostitutes are considered to be the most affected contingent [2, 6]. The virus has been shown to be transmitted by sexual relations, parenteral administration of infected blood and from mother to fetus. The characteristics of infected contingents and long-term observations of individuals having contact with them do not indicate the possibility of fecal-oral, air-droplet or any other mechanism of virus transmission [1]. The expansion of the geographic range of infection is basically a result of sexual contacts between residents of different countries or the sale of infected blood preparations [2, 5].

The aim of this study was to establish the level of infection by the AIDS virus among the population of Moscow and to identify possible modes of ingress of infection into our country.

## Materials and Methods

A total of 11,567 people were screened, who were selected according to epidemiological and clinical risk criteria (Table 1). According to epidemiological criteria, individuals were screened who visited a dermatological and venereal disease clinic with suspected venereal disease, including those thought to be male homosexuals according to clinical signs, and also drug users injecting drugs parenterally. Patients of several Moscow hospitals with diseases in which possible infection with HIV was suspected (polyadenitis, sepsis, blood disorders, atypical pneumonias, etc.) were also screened. A large proportion of those screened were students from Moscow VUZs undergoing yearly medical examinations [dispensarization].

Antibodies in serum were detected using parallel tests with ELISA test systems produced by Organon Teknika and Antigen and confirmed by Western blot analysis. Clinical and immunological data are published in a separate report.

Seropositive individuals were given questionnaires (Table 2) and examined in a hospital setting.

## Results and Discussion

Table 1 presents the results of serological screening of various risk groups.

Table 1. Results of Screening in Various Groups

| <u>Group</u>   | <u>No. screened</u>     | <u>No. seropositive</u> |
|--|-------------------------|-------------------------|
| Individuals visiting dermatological and venereal disease clinics . . . . . | 2,015 . . . . .         | 3                       |
| including:   |                         |                         |
| --homosexuals and bisexuals . . . . .                                      | 154 . . . . .           | 0                       |
| --drug users. . . . .  | 11 . . . . .            | 0                       |
| Patients:  |                         |                         |
| --with fever of uncertain etiology. . . . .                                | 140 . . . . .           | 1                       |
| --with pneumonia. . . . .  | 200 . . . . .           | 0                       |
| --with lymphadenopathy of various etiology. . . . .                        | 210 . . . . .           | 0                       |
| --with other diseases . . . . .  | 1,212 . . . . .         | 2                       |
| <u>Healthy . . . . .</u>   | <u>7,790 . . . . .</u>  | <u>14</u>               |
| <u>Total . . . . .</u>   | <u>11,567 . . . . .</u> | <u>20</u>               |

Three seropositive males were screened due to genital inflammations, two because of fever of uncertain etiology and two women were screened because of fever with acute pains in the mesogastrium. The remaining 13 seropositive individuals were detected during yearly medical examinations [dispensarization]. All seropositive individuals were students from various regions of the world. After a comprehensive examination, two individuals were diagnosed as having AIDS, 16 individuals had generalized lymphadenopathy and two were carriers without clinical signs of HIV infection.

All seropositive individuals were from countries in Africa (Table 3). The percentage of seropositive individuals from various regions corresponds to the level reported by other researchers [2, 6]. Anamnesis data obtained from the seropositive individuals are presented in Table 2. In all individuals, infection factors could have been heterosexual contacts and parenteral



Table 2. Epidemiological Anamnesis of Seropositive Individuals

| Case No | Age, yrs | Sex | Length of residence in USSR, months | Clinical form | No reported sexual partners |                   | Reported parenteral intervention (in native country) |                   |                                |
|---------|----------|-----|-------------------------------------|---------------|-----------------------------|-------------------|--|-------------------|--------------------------------|
|         |          |     |                                     |               | Lifetime                    | in native country | in USSR  | Type              | No months prior to examination |
| 1       | 31       | M   | 4                                   | AIDS          | 50                          | 30                | 0  | I.M.              | 20-28                          |
| 2       | 33       | M   | 5                                   | Polyadenitis  | 100                         | 50                | 2  | I.M.              | 20-28                          |
| 3       | 26       | M   | 5                                   | "             | 1                           | 1                 | 0  | I.M.              | 20-28                          |
| 4       | 27       | M   | 5                                   | Asymptomatic  | 1                           | 1                 | 0  | I.M.              | 20-28                          |
| 5       | 26       | M   | 30                                  | Polyadenitis  | 10                          | 8                 | 1  | I.M.              | 30-36                          |
| 6       | 23       | M   | 18                                  | "             | 3                           | 2                 | 2  | I.M.              | 20-28                          |
| 7       | 35       | M   | 5                                   | "             | 10                          | 6                 | 0  | Razor cuts*       | 36 and 24                      |
| 8       | 31       | M   | 30                                  | "             | 12                          | 8                 | 2  | I.V.              | 38, 36, 24 and 12              |
| 9       | 25       | M   | 7                                   | "             | 2                           | 2                 | 0  | I.M.              | 60                             |
| 10      | 25       | M   | 7                                   | "             | 3                           | 3                 | 0  | Donor             | 60                             |
| 11      | 25       | M   | 7                                   | "             | 6                           | 3                 | 0  | S.C.              | 24                             |
| 12      | 25       | M   | 30                                  | "             | 2                           | 6                 | 0  | Donor             | 14                             |
| 13      | 26       | F   | 30                                  | "             | 2                           | 1                 | 1  | I.M.              | 2-36                           |
| 14      | 22       | M   | 1                                   | Asymptomatic  | 5                           | 5                 | 0  | Appen-<br>dectomy | 12                             |
| 15      | 25       | F   | 1                                   | Polyadenitis  | 1                           | 1                 | 0  | I.M.              | 36                             |
| 16      | 21       | M   | 1                                   | "             | 2                           | 2                 | 0  | I.M.              | 38                             |
| 17      | 31       | M   | 1                                   | "             | 10                          | 8                 | 0  | I.M.              | 24                             |
| 18      | 33       | M   | 1                                   | "             | 100                         | 100               | 0  | I.M.              | 24                             |
| 19      | 27       | F   | 24                                  | "             | 3                           | 1                 | 0  | I.M.              | 24-36                          |
| 20      | 26       | M   | 4                                   | AIDS          | 2                           | 2                 | 0  | I.M.              | 36                             |

I.M.--intramuscular, I.V.--intravenous, S.C.--subcutaneous

\*--use of razor incisions in place of acupuncture for treatment of radiculitis

medical intervention in an endemic zone. All denied homosexuality and drug use. The majority of seropositive individuals had been in Moscow for 1-7 months; six people had lived there for over a year.

Table 3. Distribution of Screened Individuals According to Region of Permanent Residence

| <u>Region</u> | <u>No. screened</u> | <u>No. seropositive</u> |
|---------------|---------------------|-------------------------|
| USSR          | 5,155               | 0                       |
| Africa        | 1,851               | 20                      |
| America       | 1,559               | 0                       |
| Europe        | 1,460               | 0                       |
| <u>Asia</u>   | <u>1,542</u>        | <u>0</u>                |
| Total         | 11,567              | 20                      |

We succeeded in identifying three sexual partners of seropositive individuals involving contact over 3, 12 and 24 months. At the time of examination, all three contacts and a one-year old child of one of them were seronegative and showed no clinical signs of HIV infection. In addition, three seropositive individuals reported casual sexual contacts with women in Moscow with whom they were not well acquainted.

The data obtained indicate that viral infection undoubtedly is still not widespread among the Moscow population. However, we have detected a very significant percentage of seropositive individuals among foreigners arriving in the USSR, which makes the possibility of infection by sexual contact (heterosexual) with them quite likely. Data on four generations of patients in Sweden infected by an analogous pathway has been cited by C. Fransen et al. [4].

#### Conclusions

1. Individuals who are seropositive for HIV antigens have been identified in students from African countries studying in the USSR. Seropositive individuals have not been detected among the Moscow population.
2. The infection caused by HIV in those individuals residing in the USSR most frequently occurs in the form of generalized lymphadenopathy and more rarely as AIDS or an asymptomatic form.
3. The possibility exists for ingress of HIV from abroad and its heterosexual transmission.

# BIBLIOGRAPHY

1. Blattner, W. A., Biggar, R. J. and Weiss, S. H., ANN. INTERN. MED., Vol 103, pp 662-664, 1985.
2. Brunet, V. B. and Ancell, R. A., ANN. INTERN. MED., Vol 103, pp 670-674, 1985.
3. Guidelines on AIDS in Europe, Copenhagen, 1985.
4. Fransen, C., Jertborn, M. and Biderfild, G., International Conference on AIDS, Paris, 1986, p. 123
5. Rouzioux, Ch., Brun-Vezinet, F. and Couronce, A. M., ANN. INTERN. MED., Vol 102, pp 476-479, 1985.
6. Van de Perre, F., Clumeck, N., Carael, M. et al., LANCET, Vol 1, pp 524-527, 1985.

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CSO: 54001002

## NORTHEAST FACES MALARIA EPIDEMIC

Colombo THE ISLAND in English 29 Sep 87 p 1

[By Sisira Wijesinghe]

[Text]

The unrest prevailing in the North and East and the resistance offered by the rural population in some parts of the country against malathion spraying to have resulted in Malaria assuming epidemic proportions.

A total of 41,000 positive cases of Malaria has been reported for the month of July 1987 alone while a large number of "transmitted" cases had also been detected in Ja-ela, Gampaha, Kochchikade, Kelaniya, Kadamawatha and Wattala areas.

According to Dr Lionel Samarasinghe, Director, Anti-Malaria Campaign (AMC), the poor acceptance of malathion spraying in the Kurunegala and other districts including Bingiriya, Gokarella

etc. where chena cultivation is done has aggravated the situation.

The prolonged drought in these areas had also contributed to this increase. Another setback is the take-over of AMC vehicles by the security forces in Matale, Hingurakgoda, Embilipitiya areas for security, Dr. Samarasinghe said.

A consignment of one million tons of melethion is expected to arrive in Sri Lanka in early November under the USAID programme as a part of the 2.1 million requirement for the country, Dr. Samarasinghe added.

According to AMC reports, the breakdown of the total number of positive cases reported is as follows: March 69,000, April 41,000, May 35,000, June 41,000 and July 41,000.

/8309

CSO: 5400/4700

## MALARIA SPREADS 'RAPIDLY' IN MEEGAHAKOTUWA

54004701 Colombo THE ISLAND in English 7 Oct 87 p 12

[Text]

At the monthly meeting of the Kuliyapitiya U.C. Mr. H. A. Abeywardana (U.N.P.) said that the Malaria epidemic was spreading rapidly in the Meegahakotuwa area and requested him to request the health authorities to spray Malathion.

Mr. Dissanayake Wanni Aratchi, presided.

The chairman welcomed the new S.L.F.P. member Mr. Upali Gunathilaka and said he was assured he would extend his whole hearted support to improve conditions in the town. He thanked all those who helped at the opening of the Subharathi Pura Nava Gangoda Project.

A resolution to open up sub-Power Station at Labuyaya was unanimously adopted.

Mr. Piyadasa said that they did not have sufficient water despite the rains and requested the chairman to take steps to rectify the deficiency.

The Chairman said the lines were about 27 years old and water will be given from the tube well at Pallepitiya.

Chairman said A.M.C. authorities had informed him that house holders did not like to spray malathion into their houses and this increased the incidence of malaria.

Mr. Abeyawardana: Residents believe that prevention of Malaria was our duty and they blame us. However an immediate step should be taken. The Chairman agreed to direct the health authorities over the issue.

/13046

## BRIEFS

DYSENTERY SPREADS IN MAHAWELI--Dysentery with blood and mucus is fast spreading in the Ratkinda village in the Mahaweli 'C' Zone. Six children in the age group of 4 months-10 years have been admitted to the Badulla Hospital with these symptoms during the past week. Four of these children are reported to be in danger according to hospital authorities. Dr. Wickrema Dharmasena, Acting Medical Superintendent, and Paediatrician, Badulla Hospital told THE ISLAND that he had asked the Girandurukotte hospital authorities to take necessary steps to prevent the disease from spreading to the adjoining villages. He will also inform the Mahaweli authorities too to take immediate preventive measures. Voluntary health workers trained by the Mahaweli 'C' Zone and health authorities seem to turn a blind eye to the prevailing situation, villagers in this area alleged. [Text] [Colombo THE ISLAND in English 29 Sep 87 p 1] /8309

CSO: 5400/4700

## INFANT DIARRHEA EPIDEMIC UNABATED

54002411 Istanbul MILLIYET in Turkish 17 Sep 87 pp 2, 10

[Text] Trabzon (MILLIYET NEWS SERVICE) - The widespread appearance of diarrhea among young children continues in the eastern Black Sea area. The children's services at the State and Social Security Hospitals in Trabzon treated 124 children in the 0-7 age group for diarrhea in the past month.

Doctors say that the region is wetter owing to seasonal changes and this contributes to increased incidence of diarrhea, adding, "This is the diarrhea season."

The number of children admitted to the hospitals for treatment of diarrhea is sometimes so high that three or four infants have to be put in one bed. Hospital authorities point out that diarrhea at this season of the year is not as bad as the "acute diarrhea and dehydration" in the summer months and, for this reason, their tiny patients are treated quickly and released. "There is no serious shortage of beds," they said.

8349

## AIDS CASES INCREASE

54000001a Lusaka DAILY MAIL in English 13 Aug 87 p 1

[Text] **OVER 50 people have died from the dreaded Acquired Immune Deficiency Syndrome [AIDS] in Zambia while about 400 others have been admitted to hospitals since the disease was detected in the country.**

Cases of the killer disease have shot up from 270 officially recorded in March to 395, with increasing incidences on the Copperbelt and Lusaka.

Disclosing this in Ndola yesterday, AIDS national surveillance committee chairman Dr Sam Nyaywa said 57 people have died from AIDS, whose cure has not yet been found.

Dr Nyaywa, who is also assistant director of Medical Services, said the highest number of AIDS cases have been in the two provinces which together contribute about 64 per cent of the total number of patients.

The most susceptible victims are those in the 20 to 40 years age group who make up about 80 per cent of patients.

Stressing the need to intensify education among this sexually active age group, Dr Nyaywa said the AIDS virus in Zambia is mostly transmitted through sexual intercourse and only 10 per cent of the recorded cases are through blood transfusion.

He added that homosexuality is not common in Zambia and health educators are stressing on the reduction of promiscuity by both men and women.

He conceded, however, that AIDS occurrence is also quite high in prisons because of abnormal sexual behaviour among inmates.

Dr Nyaywa, who has been touring the Copperbelt to assess the progress of anti-AIDS campaign, said, however, that the sexual behaviour of Zambians seems to have changed over the last few months.

To stop transmission through blood transfusion, 33 blood screening centres have been established throughout the country to monitor donations.

Mothers with AIDS will be advised to terminate pregnancies or get a sterilisation to stop the spread of the disease.

As the campaign against the disease spreads, search for a cure has also been intensified by researchers who are using trial vaccines to prolong victims' lives for a few months.



Meanwhile, the British government's Overseas Development Administration is to provide £250,000 over three years to fund a major research project into the demographic and economic impact of AIDS in developing countries.

According to a press statement released by the British High Commission in Lusaka yesterday, Professor Roy Anderson, of Imperial College, London, will direct the project which has the support of the World Health Organisation (WHO) and the World Bank.

Prof Anderson's team of three research staff will work on the design of mathematical models capable of predicting the

effects of AIDS related deaths on population growth, demographic structure and economic progress in developing countries, particularly in Africa.

Britain was one of the first donors to recognise the need for international action to combat AIDS.

The British government has so far given £3.25 million to WHO's special programme on the disease, and is providing £1.6 million over three years to the International Planned Parenthood Federation to develop information and counselling services for health workers and clients of family planning associations in developing countries.

/13046

## BISHOPS URGE OPEN REPORTING OF AIDS

54000006 Johannesburg SAPA in English 1717 GMT 16 Oct 87

[Text] Harare Oct 16 SAPA—Zimbabwe's Catholic bishops have called on the government to make infection with the AIDS virus a reportable disease, in order to assess the size of the problem.

In a pastoral statement released here today, the Zimbabwe Catholic Bishops Conference said people found to have the virus should receive support and counselling and not be ostracised.

Accurate medical information about the contraction and spread of AIDS should be made available to people to enable them to assess the situation realistically, the statement said.

"We say accurate as we do not want people to panic but to assess the situation realistically, especially when called upon to deal with a person suffering from AIDS.

"Compassion must be offered without any moral judgment about the person who is afflicted and suffering," said the statement.

The bishops said AIDS could be seen as God's answer to Man's disregard for his moral law but added that God was also "the God of compassion, who bids us to be compassionate, too."

The conference called on young people to resist "the fashion of the day in matters of sexuality".

"We consider that this severe disease is a consequence of the disregard of the laws of nature.

"Misuse of alcohol or drugs creates serious health problems. The misuse of sex is the major cause of the spread of AIDS in our society and this, too, brings most serious health problems," they said. President Bush said, they will not stay neutral if they perceive that the Russians are holding a position. They will adopt a different stance only when Angola has a different relationship with Cuba and the Soviet Union.

## BRIEFS

CATTLE DEATHS GO UNEXPLAINED--PPP Regional Councillor, Man Persaud, recently drew the attention of the administration of Region 3, to the mysterious deaths of cattle in the Lanaballi-Baboon Hole area. Within two months some 40 head of cattle had died. He called for positive action in order to uncover the reasons for the deaths of the animals. The Guyana Agricultural Producers' Association has taken up this matter with the National Dairy Development Programme. [Text] [54400007 Georgetown MIRROR in English 30 sug 87 p 3] /9274

## BRIEFS

RINDERPEST VACCINE--(UNI from Trivandrum)--A new vaccine for the treatment of rinderpest, developed by the institute of animal health and veterinary biologicals at Palode, in Nedumanagad taluk, was formally released on Thursday. The vaccine was developed by Dr Ramakrishnan of the institute, using the tissue culture process. Releasing the vaccine at a function held at Palode, the state minister of civil supplies and animal husbandry, Mr E. Chandrasekharan Nair, said the government was implementing a long-term programme for the development of animal husbandry in the state with the aim of generating additional income from the rural sector. The vaccine, a "live attenuated device," was found to be immunogenetic for all varieties of cattle and buffaloes, including exotic and cross-bred varieties, according to the institute. [Text] [54500025a Bombay THE TIMES OF INDIA in English 12 Sep 87 p 9] /9274

NEW ANTIRABIES DRUG--A new drug, a single dose of which can cure rabies, is claimed to have been developed and tested by two Indian scientists, who say they are prepared to offer the drug free of cost to any scientist interested in trying it out, reports PTI. Dr U. V. S. Rana, a microbiologist at the National Institute of Communicable Diseases (NICD), Delhi and Dr U. V. Singh, a biochemist who is in private practice, said that their anti-viral compound was the result of five years of research they had begun as doctoral students at the Agricultural University in Pant Nagar. They said their drug, which is to be patented, has been tested by them on 100 dogs and 1,000 mice that were deliberately infected with street rabies virus. All the animals treated with the drug survived while untreated control animals died, they claimed. A buffalo and two dogs that naturally come down with rabies were also able to survive after a single injection of the drug they said. Dr Rana, who is working in the rabies division at NICD, said he had carried out the animal studies on his own with the help of Dr Singh. It is not one of the projects of NICD. The scientists said the chemical compound was non-toxic and could be useful in treating rabies in humans because it is cheap and is effective in single dose unlike the current vaccines that require up to 14 injections. [Text] [54500025b New Delhi PATRIOT in English 10 Sep 87 p 5] /9274

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